CREATING CLAUSULAE AT NOTRE-DAME-DE-PARIS

A STUDY OF COMPOSITIONAL PROCESSES AND TECHNIQUES

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This dissertation is submitted for the degree of
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CREATING CLAUSULAE AT NOTRE-DAME-DE-PARIS: A STUDY OF COMPOSITIONAL PROCESSES AND TECHNIQUES

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ABSTRACT

The repertory of two-part clausulae associated with the Cathedral of Notre-Dame bears witness to a unique compositional situation in late twelfth- and early thirteenth-century Paris. Developing out of a musical culture shaped by long-established oral practices, the making of this polyphony was, in many ways, reliant upon techniques of memory and ex tempore singing. But in medieval Paris, new attitudes towards the creation and transmission of this liturgical polyphony can be seen to emerge. Opportunities to experiment with musical ideas in the repertory of clausulae in particular, controlling harmonic sounds in measured time, distinguished these pieces as a premier site for the exploration of new musical techniques in polyphonic composition. Co-terminous with these creative efforts, a new interest in the recording of musical practice in writing can also be observed, with thirteenth-century compilers seeking to collect this repertory in fine codices, demonstrating a degree of special notice in the contemporary situation.

This dissertation uses the broader context of medieval Paris as a means of introducing surviving clausula collections and examining their content. While previous scholarship has primarily approached the study of clausulae from a chronological standpoint, or an examination of the relationship between the clausula and the motet, less attention has been afforded to the compositional processes and musical techniques that underpin the creation of this repertory. This dissertation attempts to address such a gap. Through an analysis of clausula settings preserved in the three main ‘Notre-Dame sources’ of this repertory (W₁, F, and W₂), it explores the compositional strategies of medieval singers who fashioned portions of plainchant into rhythmically measured polyphony. Divided into two parts, this study investigates tenor and duplum voices of clausulae in turn, examining their compositional features to illuminate the precise ways that musical materials have been devised, organised, and structured.

By placing Parisian manuscript sources of chant at the centre of clausula analysis for the first time, this thesis exposes a spectrum of possibilities available to singers as they set these melodies as clausula tenors. It demonstrates that some tenors reveal a particularly close
affinity to practices of singing chant, drawing out and emphasising certain properties of those underlying melodies, while others treat chant melismas in more abstract terms. The range of tenor designs identified here in turn argues for a much more flexible treatment of chant in this polyphonic context than has been acknowledged in scholarship, indicative of singers’ highly creative engagement with their chant heritage.

The composition of the upper voices of clausulae is also considered: in a series of case studies, techniques for devising melodic material above a plainchant foundation are categorised and examined. Confronting many of the analytical challenges involved in the study of these melodies, this analysis explores how singers were able to test out melodic ideas in unique, and often particularly sustained ways. A number of recurring compositional techniques that support a view of duplum melodies as deeply interconnected to one another emerge. In addition, a study of these upper voice techniques highlights a more complex relationship between duplum and tenor voices, where duplum composition may be less contingent upon the tenor voice, and in some cases, may play a significant role in the overall compositional form of a clausula setting.
FOR MY MUM
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MANUSCRIPT SIGLA

Ba    Bamberg, Staatsbibliothek, Lit. 115 (olim Ed. IV. 6)

Cl    Paris, Bibliothèque nationale de France, nouvelles acquisitions françaises 13521 (‘La Clayette’)

F     Florence, Biblioteca Medicea Laurenziana, Plut. 29.1

Hu    Burgos, Monasterio de Las Huelgas, 9 (formerly no shelf mark)

Ma    Madrid, Biblioteca nacional, 20486 (formerly Hh 167)

Mo    Montpellier, Bibliothèque interuniversitaire, Section de médecine, H.196

MüA   Munich, Bayerische Staatsbibliothek, Mus.ms.4775 (gallo-rom.42) and fragments in Berlin, Staatsbibliothek zu Berlin, Musikabteilung 55 MS 14 (formerly in the library of Johannes Wolf, Berlin)

MüB   Munich, Bayerische Staatsbibliothek, lat. 16444 (Musikfragmente E III 230–31)

Silos Santo Domingo de Silos, Biblioteca del monasterio, MS s.n.

StS   Stary Sacz, Konvent Swaty Kingy, D.2

StV   Paris, Bibliothèque nationale de France, lat. 15139, ‘Manuscrit St Victor’

VOT   Rome, Stato Città del Vaticano, Biblioteca Apostolica Vaticana, Ottoboniano MS lat. 3025 (Vatican Organum Treatise)

W1    Wolfenbüttel, Herzog August Bibliothek, Cod. Guelf. 628 Helmst. (Heinemann no. 677)

W2    Wolfenbüttel, Herzog August Bibliothek, Cod. Guelf. 1099 Helmst. (Heinemann no. 1206)
The nomenclature for describing the codicological position of musical pieces in manuscripts used throughout this thesis first states the folio number on which the clausula is copied; second, whether it appears on a recto or verso; and finally, in Roman numerals, its system number. Where more than one clausula is copied on a single system, Arabic numbering differentiates between settings.

Chants of the Mass and Office that form part of the magnus liber organi are referenced according to the system of ordering set out in Friedrich Ludwig, *Repertorium organorum recentioris et motetorum vetustissimi stili*, 2 vols. (Halle, 1910). ‘M1’, for example, refers to the Gradual of the Mass for Christmas Day, *Viderunt omnes*.

Where necessary, abbreviations of ‘long’ and ‘breve’ are made to L and B respectively. Similarly, ‘si’ refers to a simplex neume, and ‘2li’ refers to two ligated notes.

Musical transcriptions are presented in modern notation, in which a perfect long has been transcribed as a dotted crotchet. Bar lines have not been included. All ligature forms are represented with a bracket above the staff and coniunctura figures found in discant settings are shown by a dotted slur. Plicas are rendered as smaller notes and shown with a slur. Vertical strokes present in manuscript sources are represented either as rests (interpreted within the conventions of the particular modal pattern of the setting); where no rest seems to be implied, they are retained as vertical strokes in my transcription. Multiple tenor statements within a clausula are marked with Roman numerals. Where manuscripts are partially damaged, or where notes are missing, this has been represented with square brackets. Editorial ficta have been included sparingly in transcriptions, and are supplied above the stave.
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I. SINGING IN TWO PARTS

1. POLYPHONIC SINGING IN MEDIEVAL PARIS: AN INTRODUCTION

In the late twelfth and early thirteenth centuries, the city of Paris emerged as a flourishing centre of intellectual, artistic, and economic activity. Fostered by the centralisation of royal and aristocratic powers under the Capetian rule of Louis VII and then, after his death in 1180, his son Phillip Augustus, it was a time of particular prosperity and political stability for the city. It was also a period of remarkable industry. Over just a few decades, a phase of rapid development and urban expansion transformed Paris: its population increased dramatically,\(^1\) and a boom in trade not only attracted an affluent bourgeoisie, but led to a surge in the construction of new buildings and infrastructure on both sides of the Seine.\(^2\) New roads and squares were paved throughout the city and further construction, including the building of a new enclosed market in the field of Champeaux, drew increased business to the capital. Most significantly, under the authority of Philip Augustus, work also began on the new surrounding walls that encompassed larger city limits – a project that served not only to fortify the city, but also to mark out the scope of this urban growth on an architecturally monumentalising scale.\(^3\)

At the heart of this growth, both spiritually and geographically, lay the city’s most ambitious and enduring building project of all: the new Cathedral of Notre-Dame, work for

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\(^1\) Further information on the population increase in thirteenth-century Paris can be found in Craig Wright, *Music and Ceremony at Notre Dame of Paris 500–1550* (Cambridge, 1989), 236, in which Wright suggests that the city increased from about 25,000 inhabitants in the early twelfth century to 80,000 by the mid-thirteenth century; see also John Baldwin, *Paris, 1200* (Stanford, 2010), 25, which, though treating such data more speculatively, attests with some certainty to the sharp increase in the city’s population over this period.


\(^3\) As Baldwin has noted, Paris was the largest walled city in the Capetian kingdom (*Paris, 1200*, 30). My use of the notion of monumentalisation here is an evocation of Susan Rankin’s description of manuscript *F*, which she characterises as a ‘monumentalising’ of Parisian compositional practice. That is to say, I see the monumentalising of the city as manifested in its surrounding walls as a phenomenon that also came to be reflected in its musical culture. See Susan Rankin, ‘The Study of Medieval Music: Some Thoughts on Past, Present, and Future’, in David Greer ed., *Musicology and Sister Disciplines: Past, Present, Future. Proceedings of the 16th International Congress of the International Musicological Society, London, 1997* (Oxford, 2000), 154–68, at 162.
which had begun by the 1160s. Indeed, the radiating influence of this building – a testament of Gothic style and ambition – stood as an emblem of the cultural status of Paris in medieval Europe. Built on the site of several pre-existing religious buildings including the Merovingian church dedicated to St. Etienne and an oratory devoted to the Virgin, the project was overseen by Maurice de Sully, bishop of Paris. At least by 1177 the choir of the cathedral was completed, lacking only a roof, and on 19 May 1182 the main altar was consecrated by Cardinal Henry de Château-Marcay, papal legate to France.

Around this site, the city also developed an international reputation as a pedagogical centre in theology and the liberal arts; by the thirteenth century Paris contained more than 200 churches, religious orders, and scholastic houses within its walls. The prominence of the Paris schools, which by the late-twelfth century had developed independently for several decades, took on a new configuration as they ‘began to adopt forms of collective organisation’, as Ian Wei has noted. During this time, these schools, and the masters that taught in them, started to join together in corporations that not only became linked by similar educational ideals, but that also obtained special legal rights and privileges; in 1200 Philip Augustus granted these masters the first charter for a University of Paris, and by 1215 a list of statutes was issued by Robert de Courçon, apparently already setting out organisational divisions between faculties. As a result, students and scholars converged upon the Île-de-la-Cité and its surrounding institutions, drawn by a pedagogical milieu and by internationally

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4 It is widely believed that Pope Alexander III laid the cornerstone of the new cathedral during his visit to Paris in 1163, though Craig Wright has cast doubt on this idea. See Wright, *Music and Ceremony*, 6.


6 Conceivably, services may have taken place for some time at Notre-Dame before the consecration of the main altar, though the Merovingian church on this site was still in place until the 1190s (when work on the transept and nave of Notre-Dame was well underway), and it is not clear exactly when the transition to the new cathedral was made. This is an argument proposed by Wright (see *Music and Ceremony*, 7), which draws upon an account dated from 1182 by the Chronicler of Anchin – who apparently witnessed a service of Vespers at Notre-Dame – to suggest that services had been going on for some time at the cathedral. On the Merovingian church being torn down, see Baldwin, *Paris, 1200*, 24.

7 Wright, *Music and Ceremony*, 236.


9 These are discussed in detail in *ibid.*, chapter 3: ‘The University of Paris in the thirteenth century’.

renowned teachers. One wide-reaching consequence of this intellectual migration into and out of Paris from as far as Germany, Italy, and England, was the dissemination of materials and practices learnt around the university, across Europe.

It is within this environment – of royal patrons, a wealthy bourgeoisie, and of numerous scholastic institutions – that one can also trace significant technological developments in book-making for which Paris became renowned. The city and its inhabitants, as John Baldwin has suggested, became ‘voracious consumer[s]’ of the written word, fuelling an industry that led one near contemporaneous writer to describe Paris as ‘an orchard of all types of books’ [viridarium universorum voluminum]. In fact, only a few streets from Notre-Dame, around the Rue Neuve Notre-Dame, lay one of the first medieval centres of commercial book production, filled with workshops and traders for every stage of the production process, from parchmenters, scribes, and painters, to binders and book merchants. It is from this context that a new medieval fascination with writing and recording texts can be discerned most clearly, made evident not only by the documentary practices that preserved them, but by the scale of book production in this burgeoning industry.

Against this vibrant cityscape, the liturgical polyphony associated with Paris during the late twelfth and early thirteenth centuries emerged as the one of the most influential and widely disseminated musical repertories in medieval Europe. Of course, the elaboration of


13 Baldwin, Paris, 1200, 43.

plainchant in polyphony was, by this point, a well-established tradition of liturgical performance and many religious institutions and monastic centres had become renowned as advanced practitioners of this art. In this regard, and developing out of a musical culture shaped to a significant degree by long-established oral practices, the making of this polyphony can be viewed in many ways as reliant upon techniques of memory and of ex tempore singing both in the cultivation of existing repertories and in the creation of new ones. But in medieval Paris in particular, the making of this music was no longer viewed only as a ‘performance art’ – a practice of performing chant already centuries old by the thirteenth century. Particular polyphonic responses to these liturgical melodies, though subject to constant reinvention, came to be familiarised, widely disseminated, and themselves the basis of new composition. Far from transitory musical moments, these creative efforts were deemed important enough by thirteenth-century compilers to be recorded in writing in many versions; collected together in one place as a representation of a musical practice, they were viewed, even in the thirteenth century, as worthy of special notice. By all accounts, then, this highly sophisticated music, conceived of in the surrounds of the Cathedral of Notre-


17 If manuscript sources are indicative of the range of institutions and religious centres within which this polyphony was composed and performed: witnesses survive from as far away as Poland (StS), Spain (Hu, and Ma), and Scotland (Wl). For a list of extant sources, see Appendix 1. Without doubt, however, Paris was a significant point of focus for this polyphonic practice.


19 This phenomenon can already be seen at eleventh-century Winchester, though in a Parisian context the act of writing down and of collecting polyphonic music was achieved on a considerably larger scale.
Dame, may be viewed as a pronounced reflection of the cultural and intellectual ambitions of this dynamic cosmopolitan centre.
2. **Organa and Clausulae**

In many ways, the basis of polyphonic musical practices associated with Paris, and specifically with the cathedral of Notre-Dame, is to be found in the repertory of *organa*. Set on the solo chants of the Mass and Office – graduals and alleluias, great responsories and *Benedicamus domino* chants, as well as some processional chants – these pieces of liturgical polyphony served to adorn the most important feasts of the Church’s calendar. With the plainchant placed as the lowest voice of a setting, singers fashioned new upper parts above these pre-existent melodies, arranging voices into two principal textures: *organum purum* and discant. Discant settings of chant melodies – or portions of those melodies – were not solely bound to their placement within specific *organa*, however, and survive also as separate *clausulae*, transmitted independently in surviving manuscripts. One function of these *clausulae* was apparently to serve as substitute settings of chant melismas, to be inserted into *organa* as alternative ways of rendering that melody in polyphony, though it seems that such settings might have served other musical purposes, for example as sources for motets, or as ‘compositional études’ in their own right, as a number of modern writers have sought to argue.

One of the most important accounts of this polyphonic repertory and its development is to be found in the now famous testimony of the theorist known by scholars as Anonymous IV – an Englishman active towards the end of the thirteenth century. In what is only a brief

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20. To be sure, the singing of chant also constituted part of the performance of *organa*, and would have been used, for instance, at the choral portions of a responsorial melody.

21. The earliest commentator to propose such a function was Friedrich Ludwig in his *Repertorium organorum recentioris et motetorum vetustissimi stili*, 2 vols. (Halle, 1910), i, 23, who described *clausulae* as ‘Ersatz-Kompositionen für die Hauptfassung der Organa’ [substitute compositions for the main collection of *organa*].


contextual aside in his treatise (Anonymous IV’s focus at this point is upon a discussion of mensural notation), the theorist passes comment upon this musical practice, its composers and compositions, in a manner that already offers an indication of the reputation and cultural significance this repertory was to achieve:

And note that Master Leoninus was the best organista, so it is said, who made the great book of organum on the gradual and antiphonary to enrich the Divine Service. It was in use up to the time of the great Perotinus, who made a redaction of it and made many better clausulae, that is, puncta, he being an excellent discantor, and better [at discant] than Leoninus was.

Et nota, quod magister Leoninus, secundum quod dicebatur, fuit optimus organista, qui fecit magnum librum organi de gradali et antifonario pro servitio divino multiplicando. Et fuit in usu usque ad tempus Perotini Magni, qui abbreviavit eundem et fecit clausulas sive puncta plurima meliora, quoniam optimus discantor erat, et melior quam Leoninus erat.24

Though written several decades after this repertory was likely to have been first cultivated, Anonymous IV’s apparent familiarity with this music seems to connect him closely to a Parisian milieu. Of particular note in his report is the observation that music books – big written collections of liturgical polyphony – played an important role in the dissemination and transmission of this musical practice. Here, he suggests that this music constituted the material collected in a monumental ‘magnus liber organi’ – a big book of polyphony made ‘to enrich the Divine Service’.25 In other words, the theorist seems not only to have been aware of the musical practice he seeks to describe and codify, but also of the manner in which it came to be preserved in writing. Anonymous IV offers additional details concerning the contents of such a liber further into his treatise, describing the existence of various volumina – apparently distinguished with regard to genre, number of voices, and style of pieces – and itemising some of their contents.26 Whether the theorist had a physical book

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25 Some commentators, notably Edward Roesner, suggest that this ‘magnus liber organi’ may have encompassed the collections of polyphonic and monophonic conductus as well – a point perhaps intimated by Anonymous IV’s text, if not also the surviving manuscripts which contain several different musical genres cultivated by singers. See Roesner, ed., *Le magnus liber organi de Notre-Dame de Paris I: Les quadrupla et tripla de Paris* (Monaco, 1993), lvi–lvi. Such a reading also draws upon thirteenth-century writers’ more general usages of the term ‘organum’, on which see Fritz Reckow, ‘Das Organum’, in Wulf Arlt, Ernst Lichtenhahn, and Hans Oesch, eds., *Gattungen der Musik in Einzeldarstellungen I: Gedenkschrift Leo Schrade* (Bern, 1973), 434–496, at 437.

in his possession, or was simply commenting upon a book with which he was familiar, his account is revealing for it provides evidence of a large collection of music that was clearly known to him. It also reveals a number of details about the content and organisational principles underpinning such a book, many of which bear resemblance to the collections of this repertory that survive today. To be sure, however, no record of this book beyond its description here has survived to us and the precise form(s) that it may have taken remain somewhat unclear. Nevertheless, Anonymous IV’s observation points at once to his familiarity with practices of documenting this music in large, anthologising volumes, and to the significance of such codicological endeavour as a means of sustaining this music in an overtly historical (and historicising) format.

Anonymous IV also makes mention of two particular figures, Leoninus and Perotinus, now famous in music historiography, that he identified as creators of this repertory. Leoninus, active in the second half of the twelfth century, was most likely a canon, and an

Viderunt et Sederunt, quae composuit Perotinus Magnus, in quibus continentur colores et pulcritudines. Pro maiori parte totius artis huius habeatis ipsa in usu cum quibusdam similibus et cetera. Est et alid volumen de triplicibus maioribus magnis ut Alleluia Dies sanctificatus et cetera, in quo continentur colores et pulcritudines cum habundantia. Et si quis haberet servitium divinum, sub tali forma haberet optimum volumen istius artis, de quo volumine tractabimus in postpositis in capitulo isto’. Mention of books of organum, divided into different volumina, can also be found in several other places in the treatise, for example at 40:24, 48:17, 60:28, and 82:26.


28 This noted, and while the precise object being described by Anonymous IV has not survived, the conception of a big archival book containing this music finds form, for example, in manuscripts such as F.


30 A number of commentators have positioned these figures as the first composers identifiable in the history of music composition – a view perhaps first espoused by Friedrich Ludwig in ‘Perotinus Magnus’, Archiv für Musikwissenschaft 3 (1921), 361–370, at 363–4. This view has been deconstructed by Anna Maria Busse Berger in ‘Prologue: The First Great Dead White Male Composer’, Medieval Music, 9–44.
active poet and musician, at Notre-Dame.\[^{31}\] Far less is known of Perotinus, the apparent composer of ‘many better clausulae’, though he seems also to have worked at the cathedral, a little later than Leoninus, around the turn of the thirteenth century.\[^{32}\] However, as a result of Anonymous IV’s description, it is possible to make associations between Perotinus and several specific compositions preserved within extant manuscripts, as well as to other important figures active at Notre-Dame at this time\[^{33}\] – not least to Philip the Chancellor.\[^{34}\] In fact, several further pieces of evidence support a case linking these figures, as well as the origins of this musical repertory, quite directly to Paris’s new cathedral. In this regard, an edict dating from 1198, issued by the Bishop of Paris, Eudes de Sully, relating to the use of polyphony at Notre-Dame, explicitly comments upon the singing of the Christmas gradual *Viderunt omnes* in as many as four parts at the cathedral – quite possibly a reference to the four-voice setting of the chant Anonymous IV attributed to Perotinus.\[^{35}\] Furthermore, and perhaps most convincingly, the repertory of *organa* preserved within surviving manuscripts has also been shown to bear an extraordinary similarity to the liturgical practices of Notre-Dame and its temporal and sanctoral cycles.\[^{36}\]

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\[^{31}\] One detailed investigation into Leoninus can be found in Craig Wright, ‘Leoninus, Poet and Musician’, *Journal of the American Musicological Society* 39 (1986), 1–35. See also Rudolf Flotzinger, *Leoninus musicus und der Magnus liber organi* (Kassel, 2003).

\[^{32}\] On the figure of Perotinus, see Wright, *Music and Ceremony*, 288–294; Rudolf Flotzinger, *Perotinus musicus: Wegbereiter abendländischen Komponierens* (Mainz, 2000); and Heinz-Klaus Metzger and Rainer Riehn, eds., *Perotinus magnus, Musik-Konzepte*, 107 (Munich, 2000). While many scholars have sought to place Perotinus within the liturgical community of Notre-Dame, the commonness of the name ‘Petrus’ complicates a definitive identification.

\[^{33}\] After Anonymous IV introduces the figures of Leoninus and Perotinus, he continues: ‘Ipso vero magister Perotinus fecit quadrupla optima sicut Viderunt, Sederunt cum habundantia colorum armonicae artis; similiter et tripla plurima nobilissima sicut Alleluya Posui adiutorium, Nativitas etc. Fecit etiam triplices conductus ut Salvatoris hodie et duplices conductus sicut Dum sigillum summi patris ac etiam simples conductus cum pluribus alii sicut Beata viscera etc.’. See Reckow, *Der Musiktraktat*, i, 46.


\[^{35}\] On this edict, see Wright, *Music and Ceremony*, 239.

\[^{36}\] Although the subject of some contention, Craig Wright has now convincingly demonstrated that the chants used, and the ordering and additional layers within the liturgical cycle, most likely originate solely from the Cathedral of Notre-Dame towards the end of the twelfth century (see Wright, *Music and Ceremony* 248–257). This re-evaluates Heinrich Husmann’s additive interpretation of the *magnus liber*, in which certain pieces were included at later dates and from other Parisian churches. See Husmann, ‘The Enlargement of the “Magnus liber organi” and the Paris Churches St. Germain l’Auxerrois and Ste. Geneviève-du-Mont’, *Journal of the American
But while Leoninus and Perotinus and their musical styles have received significant attention in scholarship on this repertory, it remains to be said that attempts to determine the specific contributions of these figures, especially to the body of two-part *organa* and *clausulae* are speculative at best. In all likelihood, the music transmitted within manuscripts was the work of many musicians operating over several decades, across a number of different musical (and perhaps liturgical) traditions. Furthermore, the constant recasting of materials to which collections bear witness signal these pieces, and most especially the repertory of *clausulae* – since they often present many different polyphonic responses to the same portion of chant – as of special compositional interest for singers. Indeed, one of the most striking aspects of this discant repertory is the presentation of a range of different compositional possibilities available for making a piece: the working out of an array of rhythmic and melodic strategies, and the constant experimentation with musical ideas and ways of writing those ideas down. In short, these *clausula* settings seem to demonstrate that singers were thinking in a highly creative manner about how to put two voices together in polyphony.

What emerges from this repertory of *clausulae* in particular, I want to suggest, is evidence of a fundamentally new approach to polyphonic composition: where motivations for creating music appear to extend beyond a purely liturgical function for the first time. For one, such motivations seem to have given rise to new artistic impulses on the part of singers that led to the creation of ‘better, longer, more complex, more beautiful’ pieces, as Norman Smith has suggested. At the same time, the fixing of sound in measured time according to a system of patterned rhythms presented these singers with a whole new set of compositional parameters to explore. The opportunities to test out musical techniques and structures within this kind of texture, controlling harmonic sounds in measured time, in turn marks the

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38 My use of the term *clausula* henceforth refers both to discant settings preserved as independent *clausulae* within manuscripts and those preserved within an *organum* as well. Where necessary, the particular compositional situation in which a *clausula* appears will always be noted.

39 The sheer number of ways of setting individual passages of chant can be seen as one indication of a move away from direct functionality – a point to be discussed in more detail throughout the thesis.

40 Smith, ‘The *Clausulae* of the Notre Dame School’, i, 57.
clausula as a premier site for invention in the liturgical polyphony of late the twelfth- and early thirteenth-century: the extent and variety of collections preserved within surviving manuscripts suggests that these pieces captured the imaginations of Parisian organistae for decades.  

The word ‘organistae’ appears frequently in the treatise of Anonymous IV to indicate singers of organum. For a detailed discussion of the role of an organista (also, organizator and magistri organici) see Christopher Page, The Owl and the Nightingale: Musical Life and Ideas in France 1100–1300 (London and Berkeley, CA, 1989), 144–152.
3. AN HISTORIOGRAPHICAL OVERVIEW

In 1954, as part of an entry for Die Musik in Geschichte und Gegenwart on ‘discantus’, Manfred Bukofzer summarily suggested that the history of the clausula repertory still remained to be written.\(^{42}\) Bukofzer’s assertion was not only a comment on a general paucity of scholarship on this repertory since the ‘rediscovery’ of manuscripts containing it in the mid-nineteenth century; it was also a recognition that when the clausula had been studied, it was most often viewed in terms of its relationship to another medieval polyphonic genre – the motet.\(^{43}\) Indeed, following Wilhelm Meyer’s ground-breaking 1898 essay ‘Der Ursprung des Motett’s’, scholars of the early twentieth century devoted considerable energy to investigating a link between these two musical types; as a result, their studies tended to view clausulae primarily as sources for motets rather than as a category of composition worthy of attention in its own right.\(^{44}\) Such a perspective is largely confirmed in the first significant repertorial survey of this music undertaken by Friedrich Ludwig which, though laying crucial and enduring philological foundations for the analysis of clausulae,\(^{45}\) approached the work of cataloguing this repertory only insofar as it intersected with work on the motet.\(^{46}\)

It was Norman Smith, building on the work of Ludwig’s catalogue, who first sought to address this historiographical skew, offering what he described as ‘the groundwork for, and the first fruits of, a systematic study of the clausula considered as a musical type in


\(^{43}\) Some of the first mentions of manuscripts containing this repertory can be found in Ludwig Bethmann, ‘Nachrichten über die von ihm für die Monumenta Germaniae historica besuchten Sammlungen von Handschriften und Urkunden Italiens, aus dem Jahre 1854’, Archiv der Gesellschaft für ältere deutsche Geschichtskunde 12 (1874), 719; and Léopold Delisle, ‘Discours’, Annaire-bulletin de la Société de l’Histoire de France 22 (1885), 82–139. Friedrich Ludwig also reports the inclusion of F in Angelo Maria Bandini, Catalogus Codicum Latinorum Bibliothecae Mediceae-Laurentianae (Florence, 1775), II, 1–4. See Ludwig, Repertorium, i, 58.

\(^{44}\) Wilhelm Meyer, ‘Der Ursprung des Motett’s: Vorläufige Bemerkungen’ (Göttingen, 1898), repr. in Gesammelte Abhandlungen zur mittellateinischen Rhythmik (Berlin, 1905), ii, 303–41.

\(^{45}\) Ludwig, Repertorium. Perhaps the most enduring element of Ludwig’s catalogue is the system for numbering chants for the Mass [M] and Office [O], which has been maintained almost universally in subsequent scholarship.

\(^{46}\) For a discussion of some of the inconsistencies of Ludwig’s catalogue as it relates to the repertory of clausulae, see Smith, ‘The Clausulae of the Notre Dame School’, 7–12.
itself’. Seeking to revise Ludwig’s study through a new survey of manuscript sources, in 1964 Smith offered his own ‘catalogue raisonné’ of the clausula repertory and in so doing, attended to many practical and stylistic questions related to the definition of its form. Since then, several further repertorial studies and catalogues have sought to extend the scope of Smith’s work: in this regard, Rudolf Flotzinger’s 1969 study Der Discantussatz, and Rebecca Baltzer’s 1974 PhD dissertation ‘Notation, Rhythm, and Style in the Two-Voice Notre Dame Clausula’ each took steps to move scholarship beyond philological descriptions and cataloguing, seeking for the first time to explore questions relating to the composition and development of the clausula repertory. In Der Discantussatz, for example, Flotzinger concerned himself less with the relationship between clausula and motet and more with charting the emergence of a discant style from what he perceived as the earliest layers of the organum repertory. Suggesting that this narrative ‘can not only be traced backwards from the motet, but forwards, from a stage before the actual beginning of discant singing’, Flotzinger argued that the organisation of voices into rhythmic patterns is to be viewed as a gradual process of formalisation that grew out of passages of purum and copula within organa, and that the clausula represents a later, more developed stage of this compositional situation.

Turning attention to the clausula repertory in particular, Flotzinger attempted to account for the evident diversity of polyphonic settings recorded in manuscripts, proposing a stylistic chronology of the repertory both in terms of tenor organisation and duplum design, that he viewed as characterised by a growing complexity in compositional approach. Similarly interested in the identification of chronological layers in this repertory, Rebecca Baltzer sought to systematically map rhythmic designs across two-part clausulae in order to present a model for the development both of this liturgical polyphony and for modal rhythm.

Offering perspicacious commentaries on many clausulae as she went, Baltzer divided up the repertory into groups based on the rhythmic design of tenor melodies to assess the

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47 Ibid., 5.


49 Flotzinger, Der Discantussatz, 85. ‘Der Ausgangspunkt ist also auf jeden Fall in den Discantuspartien zu suchen, doch läßt sich die Frage von hier aus nicht nur nach rückwärts bis Motette… verfolgen, sondern um einen Schritt nach vor bis zum eigentlichen Beginn des Discantus im vorliegenden Zusammenhang…’.

50 Here, Baltzer’s work can be seen to intersect with several other studies on the development of the modal system. For a methodological overview of Baltzer’s thesis, see Baltzer, ‘Notation, Rhythm, and Style’, 10–16.
chronological position of these rhythmic types against a broader narrative of the development of this music. As a result, her study aimed to demarcate a number of compositional layers – and more speculatively, particular dates of these layers – distinguishable within the surviving repertory.

But while the emphasis of these studies and several others has been directed towards establishing a chronology for the development of the clausula repertory, the work of this thesis now seeks to move away from such historical paradigms.\footnote{For a further example of a study seeking to develop such a repertorial chronology, see Janet Knapp, ‘Polyphony at Notre Dame of Paris’, in The New Oxford History of Music ii, 557–635.} For, though case-by-case arguments of chronological priority have, in many instances, been made quite persuasively – Edward Roesner’s essay ‘Who “Made” the Magnus Liber?’, or Catherine Bradley’s ‘Re-workings and Chronological Dynamics in a Thirteenth-Century Latin Motet Family’ offer two convincing examples – the task of hypothesising about a repertorial chronology presents a substantially larger set of analytical issues.\footnote{See the discussion of organum settings of Alleluia V. Adorabo ad templum sanctum tuum and Alleluia V. Posui adiutorium in Edward Roesner, ‘Who “Made” the Magnus Liber?’, 235–241. In addition to Catherine A. Bradley, ‘Re-workings and Chronological Dynamics in a Thirteenth-Century Latin Motet Family’, The Journal of Musicology 32 (2015), 153–197, see also chapters 3 and 4 of Bradley, Polyphony in Medieval Paris: The Art of Composing with Plainchant (Cambridge, 2018).} This is especially so when the principal determinants of such a chronology are based on accounts of the history of rhythmic modal development and on the notational orthographies of particular manuscript sources. Indeed, projecting such a history onto the clausula repertory, and reading the resulting delineation of rhythmic groupings as markers of a compositional chronology seems to overlook the very real possibility in practice of chronological overlap between the use of one rhythmic pattern and another. Moreover, advancing a chronology on these terms would appear to neglect a feature of the clausula repertory many have viewed as a defining characteristic, based on the constant reworking of materials and a resulting web of interrelated compositional designs. In short, once a rhythmic idea had been established as a strategy for making a clausula, it could then have been subject to continuous reuse by singers over time, quite beyond perceived historical layers of modal development. Notation, too, may not always be a useful tool for chronological comparison since the notational figures used by a scribe may often reveal more about the changing demands and specific contexts of a rhythmic situation than about an argument of compositional chronology. As Roesner has suggested, ‘the notational design expressing the rhythm desired by a composer was likely to be shaped to a considerable
degree by factors having to do with the circumstances of origin of the individual MS’. Attempts to view particular notational orthographies as indicative of the chronological priority of a clausula witness may thus unwittingly set aside considerations of notational detail (and difference) that inevitably arise from the situation in which the piece was copied. In this regard, the range of notational orthographies traceable even within one manuscript, whereby the same rhythm can be notated in very different forms, or a variety of rhythms can be represented by just one notational figure, speaks to an inherent flexibility in this notation – a pragmatism in the representation of sound through writing, to evoke Wulf Arlt and Nicolas Bell – that complicates any determination of chronology. With this in mind, and while subsequent scholarship remains indebted to the analytical basis such repertorial studies have provided, the chronological conclusions they present may now benefit from fresh evaluation on different terms.

Alongside these studies and catalogues, another significant endeavour of scholarship has been to make this music available through facsimile reproductions, commentaries, and transcriptions. Indeed, facsimile reproductions of all major manuscript sources of this repertory had been published by the 1960s, at a time when work to transcribe surviving collections of clausulae was also well underway. A number of significant contributions to this undertaking first find form within PhD theses, and William Waite was among the first to

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publish edited transcriptions of this music.\textsuperscript{57} Since then, transcription work by Hans Tischler sought to present a comparative edition of all two-part \textit{organa}, detailing a number of concordances and interrelationships among this repertory.\textsuperscript{58} And most recently, the \textit{Magnus liber} editions by L’Oiseau-Lyre have provided transcriptions of all \textit{organa} and \textit{clausulae} recorded in the major manuscript sources.\textsuperscript{59} As a result, and with the ready availability of online images of manuscripts, the repertory of \textit{clausulae} has never been more accessible to scholars.\textsuperscript{60}

In several regards, however, the claim made by Bukofzer in his \textit{MGG} article has yet to be fully addressed. In particular, questions surrounding the compositional process underpinning this repertory – of how singers set about creating a \textit{clausula} – have remained largely unanswered by scholarship to date. To be sure, prior to the significant philological work undertaken by previous scholars, attempts to embark upon such analysis could hardly have been feasible. Yet arguably, this lacuna in scholarship may also be a result of a more pressing interest commentators have shown to questions of chronology, and to reconstructing a historical narrative for this repertory. One consequence of this is that work to understand just what the constituent elements of a \textit{clausula} setting may be, and how these elements came to be used by singers, still remains a nascent aspect of discussion.

When commentators have broached this issue, arguments of compositional process have most commonly been framed in terms of a now well-entrenched opposition between oral and written practice. At one end of this spectrum, and as scholars have sought to recognise the ever more foundational role writing appears to play in this polyphonic musical culture – that is, in not only shaping the documentary practices that preserved this repertory, but in actively influencing the way settings might be created as well – many placed particular emphasis on writing as the preeminent medium for \textit{clausula} composition. In this regard,

\begin{itemize}
  \item \textsuperscript{57} Norman Smith’s thesis ‘The \textit{Clausulae} of the Notre Dame School’, for example, offers a complete transcription of the \textit{W}1 \textit{clausula} collections. See also William Waite, \textit{The Rhythm of Twelfth-Century Polyphony: Its Theory and Practice} (Westport, CT, 1954) which is itself a publication of Waite’s 1951 Ph.D. thesis of the same name (Yale University); and Dittmer, \textit{Firenze, Biblioteca Mediceo-Laurenziana, Pluteo} 29.1. Similarly, before Baltzer, \textit{Le magnus liber organi de Notre-Dame de Paris} \textit{V}, Baltzer’s PhD, ‘Notation, Rhythm, and Style’, was the main place one could go to find transcriptions of \textit{clausulae} in \textit{F}.
  \item \textsuperscript{58} Tischler, \textit{The Parisian Two-Part Organum}.
  \item \textsuperscript{59} Edward Roesner, ed., \textit{Le magnus liber organi de Notre-Dame de Paris} I-VII (Monaco, 1993–2009).
\end{itemize}
Rebecca Baltzer suggests that the *clausula* repertory was one that was ‘composed, written down, and learned by *organistae* before performance took place’. Edward Roesner, too, has argued that this repertory was ‘not only preserved and transmitted in musical notation but also conceived in writing for much of its history’. And arising from this, several studies have looked to identify specific *clausulae* that may bear signs of a written compositional practice, or to illustrate how scribes themselves may sometimes be involved in the process of composition, apparently (re)formulating pieces as they copied them down.

At the other end of this spectrum, writers including Anna Maria Busse Berger, Guillaume Gross, and Jennifer Roth Burnette have attempted to investigate and account for the ways in which singers may have formulated polyphonic settings without recourse to writing. Here, arguing for a situation in which much of the repertory of liturgical polyphony, at least in its early history, was transmitted orally, Busse Berger’s book *Medieval Music and the Art of Memory* aimed to show how medieval techniques of memorisation came to bear quite directly upon the musical practices of singers in *clausula* composition. In particular, she comes to suggest that singers made use of ‘rigid structure and repetitive modal patterns’ in the process of composition and transmission, as a means of remembering their musical creations. Much of the value of this work lies in its thought-provoking consideration of medieval memory practices in this musical context for the first time; however, it seems that many aspects of *clausula* composition remain unaccounted for within this conceptual model. In particular, I find that the emphasis placed upon the functional role of musical patterns gives too little regard to the ways artistic motivations might also inform the process of composition. Further, it is to be noted that the majority of *clausulae* preserved in surviving collections have not been arranged into the rigid structures and neat ‘repeated patterns’ Busse Berger describes – such compositions, however, have simply been set aside

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63 On this, see Roesner, ‘Who “Made” the *Magnus liber*?’, 245–56; and Bradley, ‘Re-workings and Chronological Dynamics in a Thirteenth-Century Latin Motet Family’, 168–84.


in her discussion.\textsuperscript{66} Also working in this methodological vein, Guillaume Gross, analysing the repertory of three- and four-part \textit{organa}, offered a detailed examination of compositional techniques through the analytical optic of 13\textsuperscript{th}-century \textit{artes poeticae} and notions of color. Similarly to Busse Berger, Gross attempted to identify a number of small melodic figures, as well as techniques for extending those figures, that seemed to serve as the musical building blocks for composition within a principally oral practice.\textsuperscript{67} Likewise, Jennifer Roth Burnette, in her PhD dissertation upon two-part \textit{organa} (specifically focussing on a set of melodically-related Office settings), sought to draw parallels between mnemonic techniques of the medieval \textit{ars memoriae}, and the creative processes underlying liturgical polyphonic composition, arguing for the existence of a melodic thesaurus of musical techniques known by singers for making an \textit{organum}.\textsuperscript{68}

One of the connecting threads through these studies that have looked to differentiate between oral and written practices (or more precisely, have attempted to isolate features of \textit{clausulae} preserved in writing that may exhibit elements of oral practice) is to be found in a discussion of the notion of ‘composition’ in this musical context. Leo Treitler was perhaps the first to engage directly with this issue in his study ‘Written Music and Oral Music’, where he seeks to set out a musical situation in which writing is to be viewed as an augmentation of compositional behaviours long-established in an oral domain.\textsuperscript{69} In attempting to reimagine what he describes as a ‘medieval paradigm’ of music making, in which modes of composition do not need to be differentiated under binary categories of oral and written process, Treitler advances a view of written practice ‘as a contingent, not a constituent aspect of the music-making complex, an aspect with some autonomy, with its own aims, values, purposes, prestige, reciprocating with its own influence on music’.\textsuperscript{70} In other words, he proposes that the literate situation into which this music expands comes to play an active role in shaping compositional possibilities by at once interacting with existing oral practices, while providing a range of new creative options in the making of a piece. Sybille Krämer’s work on ‘Schriftbildlichkeit’ offers a useful clarification of this point: graphical representations, she

\textsuperscript{66} Ibid. For further information on ‘unpatterned’ tenor designs see below at 63, no. 62.


\textsuperscript{68} In particular, see chapters 3 and 4 of Roth Burnette, ‘Organizing Scripture’.


\textsuperscript{70} Ibid., 67.
suggests, ‘are not only a medium for the representation of objects and areas of knowledge, but at the same time an instrument for their exploration and generation’.\(^{71}\) To now view this idea against medieval notions of ‘composition’, Mark Everist’s intimation that a composer’s skill might lie ‘as much in the combination of pre-existent materials with new ones as in the original composition of poetry and music’ – in whatever form that material came to be known and shared – presents an attractive explanation of this creative endeavour.\(^{72}\) ‘Compositio’, he proposes, ‘implied synthesis in logic, and *compositum* a compound of matter and form’; these thirteenth-century usages encourage us to view the act of composition as the ‘placing together’ [*componere*] of musical materials, the balance between new and old, written and unwritten continuously changing.\(^{73}\) Composition, in this medieval situation, might thus be understood productively in the light of musical reuse of old material just as much as the creation of new musical ideas.

The emerging picture of this compositional practice, therefore, is one in which oral and written modes of creating a *clausula* appear far from polarised; rather, they often seem highly interactive, mutually informative, and operating on a number of different compositional layers within a *clausula*. Furthermore, the delineation of one or other of these categories in scholarship has often proved a thorny task, especially in consideration of the historical distance between surviving manuscripts and the formulation of this repertory, and because the degree of their influence may differ markedly between pieces. Yet, by beginning to acknowledge the possibility of a nexus of oral and written practices influencing the process of composition, we may come to arrive at a more sophisticated conception of this musical culture. Such a point becomes the principal argument of Susan Rankin’s study of Parisian liturgical polyphony in ‘The Study of Medieval Music’, in which she proposes that the records of polyphonic repertories from thirteenth-century Paris relate to a situation ‘in flux’.\(^{74}\) Illustrating how ‘signs of orality within a literate situation, as well as literacy within an oral situation’ may be drawn out from such records, Rankin’s aim is to draw attention to a compositional practice in which oral and literate modes of expression may appear tightly

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\(^{73}\) Ibid.

\(^{74}\) Rankin, ‘The Study of Medieval Music’, 162.
But while the question of the medium of composition has constituted the majority of scholarship’s focus until now, a more fundamental, and arguably, more significant question relating to the mechanisms for composition – the tools and techniques for making a clausula – has rarely been discussed. Why did singers arrange chant melismas into rhythmic groupings in the way that they did? How did they design upper voices in response to those chant melodies? Put plainly, how did singers create a clausula? Few scholars have sought to answer such questions directly and a detailed analysis of the compositional processes underlying the repertory – of what specific materials are drawn upon by singers, and how they come to be used from piece to piece – has so far remained beyond the purview of scholarly discussion. One brief response to such issues, related to the formulation of a polyphonic setting, can be found in Wulf Arlt’s essay ‘Warum nur viermal?’ – a study of a clausula based on four repetitions of an Alleluia chant melisma. Seeking to highlight some of the new compositional possibilities afforded by the clausula’s rhythmically measured context, Arlt demonstrates how the rhythmic and melodic design of its tenor comes to determine the use of techniques in the duplum voice. Likewise, the work of Catherine Bradley, based on the analysis of individual clausulae and their related motets, has started to spotlight the high degree of experimentation and deliberate ‘game-playing’ that appears to underpin much of this repertory. But while these scholars and others (whose work will be discussed more extensively in following chapters) have started to lay crucial groundwork for a study of this nature, there is a great deal of scope to investigate in detail the processes of composition that led to the creation of this expansive and highly diverse repertory of clausulae. This is precisely the issue the present study seeks to address.

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75 Ibid., 159.


77 See, for instance, Catherine A. Bradley, Polyphony in Medieval Paris: The Art of Composing with Plainchant (Cambridge, 2018), 81–110.
4. Methodology

The purpose of this thesis can now be simply stated: to investigate how twelfth- and thirteenth-century singers created two-part clausulae. It aims to explore how pre-existent chant melismas were set as the tenor voice of a polyphonic setting, questioning how such melodies were drawn upon, organised, and rendered into rhythmic measure. It also seeks to examine how the upper voices of clausulae were constructed above these liturgical melodies, asking what kinds of materials singers used, how they came to be applied within specific clausulae, and what relationship such materials may have had to one another. In so doing, this study seeks to address an imbalance in present scholarship in which the musical techniques for formulating a clausula have largely remained unscrutinised. Where previous studies have tended to examine the clausula repertory through the lens of over-arching historiographical narratives – from questions of chronology, to the relation between clausula and the motet, the influences of written practice, to theories of oral compositional models – this thesis will pursue a different goal. Beginning from a detailed consideration of individual clausulae, it will analyse musical features of polyphonic settings in order to reflect upon the processes by which they were made. As will become clear, the deeper aim of this analytical work, which builds outwards from a series of clausula case studies, is to uncover and attend to issues directly relating to the musical behaviours in evidence across surviving clausula collections. As a result, this study seeks not only to throw new light onto this repertory and its musical characteristics; it also attempts to highlight the range of compositional possibilities available to singers and thus to broaden understandings of this medieval musical culture and the practices of those who created this polyphonic repertory.

Given the compositional import of the surviving repertory of clausulae, as a site of near constant musical experimentation, an in-depth analysis of the constituent elements of clausula composition is perhaps long overdue. While several scholars have begun similar work in other, related liturgical polyphonic genres – their methodological strategies helping to hone the critical apparatus for the present study – the clausula remains largely untouched by such analytical efforts. That said, the methodological issues presented by the study of
clausulae might, in several regards, be viewed as repertorially distinctive. Characterised, as they are, by ‘a network of concordances, near-concordances and partial borrowings which stretches through the repertory’, as Ian Bent has observed, a central aspect of analysis thus lies in the ability to trace and sensitively account for the high degree of re-use and musical interconnection discernible across surviving manuscripts. This, on the one hand, requires an approach that places the individual analysis of clausula settings at the centre of discussion in order to understand just how voices come to explore a particular compositional idea or musical design. On the other, it necessitates an awareness of how a specific case study may relate to broader trends and compositional behaviours identifiable across the repertory. Concomitantly, this kind of methodological mediation between individual clausulae and the repertory as a whole poses questions about notions of musical verisimilitude and difference – where a melodic idea may appear to undergo near constant reformulation from piece to piece – that frequently serves to complicate analysis. Seeking to confront this analytical challenge directly, the task of the present study lies both in illustrating how musical features of settings may relate to one another, thereby demonstrating the scale of musical interconnections across the repertory, and also in drawing attention to the often distinctive ways such features came to be used within individual clausula settings.

The point of departure for this study, therefore, is to be found in the clausula repertory itself. Though one might expect a discussion of the musical properties of clausulae to look to theoretical literature for information about how to create this music – indeed, several previous studies have started from such a point – my work begins principally from an investigation of surviving manuscript sources and the musical behaviours to which they bear witness. Of course, while extant manuscripts provide the most comprehensive insight into this polyphonic practice and the work of singers and scribes, it must also be imagined that parts of this repertory were never committed to writing, and that many other witnesses to this


80 An analogous issue seems identifiable in scholarship on the medieval refrain. As Ardis Butterfield has noted, refrain citations often show ‘a tendency towards instability, since there is a large degree of small-scale variation, yet also towards stability, since these very slightly distinctive features are often themselves repeated exactly’. See Butterfield, *Poetry and Music in Medieval France: From Jean Renart to Guillaume de Machaut* (Cambridge, 2002), 85–6.

81 Guillaume Gross’s work in *Chanter en polyphonie* stands as one pronounced example. Edward Roesner’s ‘Who “Made” the Magnus Liber?’, begins similarly, with a discussion of Anonymous IV’s treatise.
practice are now lost.\textsuperscript{82} Put another way, and especially in view of the relatively late dating of extant manuscripts, the repertory of \textit{clausulae} preserved within surviving sources is to be viewed less as a comprehensive testimony to this musical practice, and more as an indicative one, read as a glimpse into the compositional possibilities available to singers.\textsuperscript{83} And while it must be noted that the analysis of this written testimony is necessarily mediated through the evaluation and interpretation of notation within these manuscripts, the significant collections of surviving \textit{clausulae} present a wealth of opportunities to better understand the musical procedures shaping the vivid and highly interactive activity of singers. From this perspective, it is hoped that this study may also lead to a more nuanced understanding of the working habits of those singers that underpins this repertory.

A crucial resource for the present study has been the creation of a digital database of the \textit{clausula} repertory (including discant passages within \textit{organa}) preserved within the three main manuscript sources, \textit{W}1, \textit{F}, and \textit{W}2. The purpose of creating this database was not only for ease of reference in undertaking analysis, as a means of collecting together \textit{clausula} collections in one place; it was also devised so that additional relevant information relating to each \textit{clausula} – for instance, details of concordances, chant materials on which the setting is based, and notable musical characteristics – may also be presented, in a searchable format, alongside settings. In addition, through a new transcription of these collections (also presented in the database), this preliminary research attempted to detect and document a spectrum of compositional behaviours in tenor design, duplum melodies, and the relationship between voices that appear to recur across the repertory.


\textsuperscript{83} While a book such as \textit{F} seems to aim towards comprehensiveness, its contents might arguably be read as a somewhat rarefied form of a musical practice that had been refined over a period of decades and that earlier forms of this practice may not have been represented. Moreover, it cannot be assumed that the repertory copied in surviving manuscripts represents the \textit{extent} of musical possibilities in \textit{clausula} composition: other musical techniques and designs may well have been known and used by singers.
**Example 1.1**  *Clausula* database entry for *DOMINUS* F fol. 149v

<table>
<thead>
<tr>
<th>Text</th>
<th>DOMINUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>folio no.</td>
<td>F f. 149 v. I</td>
</tr>
<tr>
<td>Clausula Number in F</td>
<td>28</td>
</tr>
<tr>
<td>Image of MS</td>
<td></td>
</tr>
</tbody>
</table>

- **Viderunt omnes fines terrae salutare Dei nostri. Iubilate Deo omnis terrae:**
  - V. Notum fecit Dominus salutare suum: ante conspectum gentium revelavit iustitiam suam.  
  - All the ends of the earth have seen the salvation of our God. Rejoice in God, all the earth  
  - V. The Lord has made his salvation known: he has revealed his justice in the sight of the gentiles.

- **Liturgical use**  
  - Gradual of the Mass for Christmas Day

- **Concordances**  
  - W1 f. 49r VI

- **Ludwig Organum Number**  
  - M1

- **Tenor mode**  
  - mode 5

- **Duplum mode**  
  - mode 1

- **Notes on the clausula**
  - Frequent moments of dissonance between tenor and duplum voices, for example, a 7th apart.
  - Duplum voice formulated from a common mode 1 rhythmic pattern that recurs throughout the clausula.
  - From the middle of the clausula, several significant leaps in the duplum, often of a 5th and 6th.
  - A scribal error at the end of the clausula - copied a third too high.
  - Begins at a 3rd – a feature found in several other ‘dominus’ clausulae.

- **Baltzer transcription**

- **Transcription of clausula**
By way of illustration, Example 1.1 presents an image of a single database entry. Each entry contains core information relating to the *clausula*: its text, folio and system number within the manuscript source, its numerical position within the *clausula* fascicle(s) of that source, and an image of the setting. Further information about the chant on which the *clausula* is based, including its Ludwig number, the text and translation of the chant, and an image from a Parisian chant book (for Mass settings, this is the missal BnF Lat. 1112; for the Office, BnF Lat. 15181–82) has also been included. Following this, each entry contains transcriptions from the *Magnus liber organi* editions as well as my own, and any comments on the specific *clausula* and its musical characteristics in question.

While the database is not included in the body of this thesis, its presentation here is necessary to illustrate the basis for my work. From this case by case analysis, the present study proceeds to examine musical materials, and techniques for experimenting with these materials, used by those who created this repertory. It also seeks to describe and account for recurring musical features among *clausulae*, and thus to illustrate a foundational aspect of this repertory based on the continuous re-use of musical ideas. A hypothesis best tested by way of demonstration, in what follows, this study will isolate a number of pronounced musical characteristics of *clausulae* and analysis will show that creators of the *clausula* repertory apparently delighted in testing and tinkering with compositional possibilities as they set about making their piece. Furthermore, it will suggest that a common thread throughout the repertory is the use of a number of shared compositional techniques, to be deployed in often distinctive forms, that offered singers ways to engage with their musical materials in ever new fashion.

Yet while the focus of this thesis is upon the analysis of extant two-voice *clausula* settings as a point of entry into a discussion of compositional process, this work by no means

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84 For a discussion of why these manuscripts have been used as a copy text for the database, and their connection to a Parisian liturgical rite, see below at 54–60.

sets out to offer an exhaustive account of musical possibilities for creating a clausula. Rather, my goal is to explore and analyse in detail a limited selection of the repertory, and clausula settings drawn upon have been selected as particularly clear examples of the compositional behaviours I seek to investigate. The conclusions drawn from this analysis will be presented to persuade of the compositional possibilities available to medieval singers, while at the same time calling attention to the gamut of approaches discernible across manuscript sources. In view of this particular emphasis on the compositional practices of twelfth and thirteenth-century musicians, this thesis limits the scope of manuscripts to be considered to only those dating from the first half of the thirteenth century – that is, manuscripts in the closest temporal proximity to the period when this repertory was created. In particular, this study centres on the significant collections of organa and clausulae preserved within the three major surviving manuscripts of this Parisian repertory: W1, F, and W2 – books that, in subtly different ways, seek to record a broad representation of this musical practice, and to present it in an anthologised form. The range and diversity of settings documented in these books, most especially within the clausula fascicles of W1 and F (which frequently contain multiple different polyphonic responses to a single chant melisma), make a strong case for these sources to be viewed as particularly eloquent witnesses to the musical culture within which this repertory was created.

Like the clausulae themselves, the following parts of this thesis have been arranged in two parts. Taking each voice in turn, it analyses the compositional features of tenor and duplum parts to illuminate the precise ways that musical materials have been devised, organised, and structured. This will not only serve to expose some of the procedures that underpin their formulation; it will also offer insights into the aesthetic motivations behind this act of composition, raising new questions about how chant melodies were handled, about the compositional considerations of singers, and about the ways they created new duplum melodies over pre-existent chant tenors. But though the thesis is divided into two parts, with the priority of analysis directed towards specific issues relating to tenor and duplum voices,

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86 In addition to this analytical emphasis, it is also to be noted that many later manuscripts present particular musical and codicological questions concerning the presentation of clausulae that require analytical investigation on their own terms. StV provides one clear example, on which, see Jürg Stenzl, Die vierzig Clausulae der Handschrift Paris, Bibliothèque nationale, latin 15139 (Saint Victor-Clausulae), Publikationen der schweizerischen musikforschenden Gesellschaft, series 2, 22 (Berne, 1970); and Fred Büttner, Das Klauselrepertoire der Handschrift Saint-Victor (Paris, BN, lat. 15139): Eine Studie zur mehrstimmigen Komposition im 13. Jahrhundert (Lecce, 2011). A list of all surviving manuscript sources of organa and clausulae can be found in Appendix 1.
discussion will not be limited to one or other voice part at any one time, rather, it will look to
draw upon aspects of both voices, and the relationship between them, in order to address and
account for the compositional procedures in question. An important point emerging from this
methodological approach and the resulting analysis is an argument for a significantly more
interconnected relationship between tenor and duplum voices in clausulae than commentators
have fully acknowledged thus far in scholarship.

First, concentrating on the lower voice of clausulae, I ask how pre-existent liturgical
chants were transformed by singers into rhythmically measured tenor designs. Turning a
close eye to practices of singing chant recorded in liturgical books from twelfth- and
thirteenth-century Paris for the first time in a discussion of compositional processes in
clausulae, I begin by examining melodic divisions of the chant traceable in the notational
orthographies of chant books, comparing these to the rhythmic divisions of clausula tenors.
In so doing, I demonstrate that monophonic conceptions of the chant played an important and
hitherto unrecognised role in influencing the rhythmic design of clausula tenors. In the
second part of the chapter, and building on the analytical models afforded by the recent work
of Danielle Pacha and Catherine Bradley, I examine one particular group of clausulae, based
upon a single chant melisma, to demonstrate the significant diversity in the melodic content
of this melody as it came to be used as a clausula tenor. I go further to account for this
melodic variation, suggesting that though some of these variants undoubtedly reflect
differences in ways of singing the chants familiar to those who wrote them down, they cannot
all be so explained. This chant melisma, I will propose, was subject to deliberate alteration by
singers when set in measured polyphony, for apparently compositional ends. The remaining
two parts of this chapter then proceed to examine the musical effects of rendering chant
melismas into rhythmic measure. First, I investigate how the rhythmic design of a tenor may
be conceived to draw out particular properties of the chant melody, to be newly articulated in
rhythmic measure. Second, demonstrating that chant melismas may also be conceived of in
more abstract terms, as a series of pitches to be played with and reformulated in a discant
context, I explore how clausula tenors appear to deliberately suppress or cut across internal
structures of the chant melody, and thus, create complex compositional underpinnings on
which to construct a duplum voice.

87 In her Ph.D. dissertation, Danielle Pacha compares a number of thirteenth-century sources for the Gradual chant Propter veritatem against a ‘family’ of motet settings. See Pacha, ‘The Veritatem Family: Manipulation, Modelling and Meaning in the Thirteenth-Century Motet’ (Ph.D. diss., Washington University, 2002). This work was taken up further in Bradley, Polyphony in Medieval Paris, 10–48.
Above this tenor foundation, the third chapter of the thesis deals principally with questions about the creation of upper voices of clausulae. I begin, after a historiographical overview, with a case study of one collection of clausulae based on the TANQUAM melisma. This is used as a means of delineating several melodic behaviours to be explored in the remainder of the thesis: melodic sequence, repetition, repeated-note patterns, and the recurring use of structural frameworks for clausula design. In the study on melodic sequence that follows, I illustrate how a single technique for building a melody may be drawn upon and used in a variety of different ways. In showcasing this diversity, I aim to push back against previous characterisations of this creative process based on melodic formulae, arguing for a more flexible compositional situation, hopefully more indicative of the working habits of twelfth- and thirteenth-century musicians. Then follows a section on repetition which aims not only to investigate how clausulae might be seen to play with their melodic material, but also seeks to develop greater nuance in characterising this process. Through three case studies of clausulae, it argues that existing notions of ‘play’ do not satisfactorily explain or account for the kinds of compositional decisions musicians made as they set about exploring musical ideas within a clausula. In the next section, I examine uses of repeated-note patterns across the clausula repertory. This serves as a means of engaging with notions of color common to thirteenth-century theoretical treatises, and in particular, with the melodic device mentioned in a copy of Johannes de Garlandia’s De mensurabili musica described as ‘florificatio vocis’. My purpose is to suggest that Garlandia’s description of florificatio is rooted in the essential activity of listening; what is being described in the treatise is a melodic behaviour that has been recognised as distinctive and familiar within this repertory. Using this as a working methodology for my own analysis, I investigate a number of appearances of repeated-note patterns, exploring the range of forms and functions that can be traced among surviving collections. In the final part of the chapter, I show how upper voices impact upon structural and harmonic elements of clausula design, suggesting that particular strategies for formulating a duplum can be seen to create certain compositional parameters – frameworks to be inhabited by musicians – that govern the conception of a setting.
W1 – Wolfenbüttel, Herzog August Bibliothek, Guelf. 628 Helmst.

The origins and early history of W1 remain somewhat hazy. It is likely that the book was copied in Scotland, probably for use at the Augustinian cathedral priory of St Andrews, in around 1230–1240 – a dating, now largely accepted in scholarship, that places W1 as the earliest witness of polyphony associated with this Parisian musical practice.88 Perhaps the most conspicuous clue in support of the book’s Scottish provenance, attesting to the manuscript’s presence at St Andrews soon after its creation, is to be found in its seventh fascicle, where an ex libris states ‘liber monasterii S. andrae in scociis’, in a hand that probably dates from the fourteenth century.89 But additional evidence elsewhere in the book lends further weight to this hypothesis. In particular, W1’s third fascicle records two polyphonic settings of responsories for the feast of St Andrew – unica in the repertory – that closely align it with the liturgy of the cathedral priory.90 That these organa appear towards the end of the fascicle, after the main cycle of organa had been copied, seems highly indicative that these pieces were insular additions. One persuasive explanation for their inclusion was that they were copied at the end of the Office cycle – conceivably, from a different exemplar – in order to provide polyphonic chant settings for what was a major local feast. Additionally, further palaeographical and art historical analysis undertaken by scholars


89 This is on fol. 64r. This may, in the first instance, seem like an unusual position for an ex libris. As Edward Roesner has noted, however, its position on the second leaf of a gathering is quite typical, and since this fascicle is the work of the second scribe, ‘the person who entered the ex libris would likely have assumed that it fell at the start of the scribe’s “manuscript” (as indeed it would have, had the criterion of visual homogeneity not taken precedence over the underlying plan of organization)’. See Roesner, Le magnus liber organi de Notre-Dame de Paris VII, xlvii, no.9.

including Rebecca Baltzer,\textsuperscript{91} Julian Brown, and Sonia Patterson,\textsuperscript{92} as well as recent work by Katherine Kennedy Steiner, have all appeared largely in support of $W_1$’s Scottish origins.\textsuperscript{93}

The book itself is comprised of eleven fascicles and its musical contents are disposed according to the organisational principles obtaining in all the major ‘Notre Dame’ sources, grouped by genre, the number of voices in a work, and where possible, according to liturgical calendar. Showing some significant signs of soiling and staining, probably the result both of regular use and poor preservation, the book’s first fascicle lacks its two outer bifolios, and a number of further lacunae – including a whole gathering – allude to a life of regular physical wear (these lost pages are detailed in Table 1.1).\textsuperscript{94} It would seem that $W_1$ was a book for the direct use of musicians, conceivably for occasional practical consultation. Three scribes, and at least three layers of copying, can be identified within the book.\textsuperscript{95} The first scribe appears to have worked on fascicles I, III, IV, and VIII–X, while the second produced fascicles VI and VII. As Edward Roesner notes, however, it appears that the first scribe ‘supplemented the copying of the second (and also added to his own work)’ at several points – an implication being that the first scribe may have been ‘responsible for the manuscript as a whole’, or perhaps, that he directed the work of the second.\textsuperscript{96} Further distinguishing these scribal efforts, respective fascicles also appear to be copied on different grades of parchment, and while the fascicles copied by the first scribe received illuminated initials, the second scribe’s work remains undecorated. Finally, a third scribe executed the final fascicle of the manuscript, copying on parchment of a distinctly lower quality – a part of the book that contains a

\textsuperscript{91} Baltzer, ‘The Manuscript Makers of $W_1$’.

\textsuperscript{92} Brown, Hiley, and Patterson, ‘Further Observations’.

\textsuperscript{93} Katherine Kennedy Steiner, ‘Notre Dame in Scotland: $W_1$ and Liturgical Reform at St. Andrews’ (Ph.D. diss., Princeton University, 2013). Mark Everist, however, has argued that the exemplars used to produce $W_1$ originated in Paris and has sought to highlight that it is a book organised according to principles similar to other Parisian manuscripts. See ‘From Paris to St. Andrews’, 28–29 – a position which has not gained universal acceptance; see, for example, Roesner, ‘Who “Made” the Magnus Liber’, 238–9.

\textsuperscript{94} The foliation series for $W_1$ used throughout this thesis is the (most commonly used) ‘old’ numbering system, on which, see Martin Staehelin, \textit{Die mittelalterliche Musikhandschrift, $W_1$: Vollständige Reproduktion des Notre Dame-Manuskripts der Herzog August Bibliothek Wolfenbüttel Cod. Guelf. 628 Helmst.}, Wolfenbütteler Mittelalter-Studien 9 (Wiesbaden, 1995), 32.

\textsuperscript{95} Perhaps the most comprehensive palaeographical survey of $W_1$ still remains Roesner’s ‘The Manuscript $W_1$', at 34–50.

\textsuperscript{96} Roesner, \textit{Le magnus liber organi de Notre-Dame de Paris VII}, xlvi.
repertory less elaborate in musical idiom, apparently representative of a more local polyphonic tradition.  

Table 1.1  The organisation and contents of fascicles in $W_1$

<table>
<thead>
<tr>
<th>Fascicle</th>
<th>Gatherings</th>
<th>Folios</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>1 (quaternion)</td>
<td>1–8 (fols. 1–2 and 7-8 are missing)</td>
<td>4-part organa</td>
</tr>
<tr>
<td>II</td>
<td>1 (quaternion)</td>
<td>9–16</td>
<td>3-part organa and conductus</td>
</tr>
<tr>
<td>III</td>
<td>1 (quaternion)</td>
<td>17–24</td>
<td>2-part organa for the Office, one Mass setting and a Sanctus trope</td>
</tr>
<tr>
<td>IV</td>
<td>3 (quaternions)</td>
<td>25–48 (a middle bifolio of the third gathering, fols. 36–37, is missing)</td>
<td>2-part organa for the Mass</td>
</tr>
<tr>
<td>V</td>
<td>1 (ternion)</td>
<td>49–54 (the middle bifolio, fols. 51–52, is missing)</td>
<td>2-part clausulae for the Office and Mass</td>
</tr>
<tr>
<td>VI</td>
<td>1 (quaternion)</td>
<td>55–62</td>
<td>2-part clausulae for the Office and Mass</td>
</tr>
<tr>
<td>VII</td>
<td>1 (quaternion)</td>
<td>63–69</td>
<td>3-part organa</td>
</tr>
<tr>
<td>VIII</td>
<td>3 (ternion with three single leaves, followed by two quaternions)</td>
<td>70–94 (fols. 83–84 are missing)</td>
<td>One 2-part conductus, 3-part conductus, 3-part organa, one 3-part clausula, and Ordinary tropes.</td>
</tr>
<tr>
<td>IX</td>
<td>10 (quaternions apart from the third, which is a quinion)</td>
<td>95–176</td>
<td>2-part and 3-part conductus, 2-part Benedictamus domino settings, 2-part ordinary tropes</td>
</tr>
<tr>
<td>X</td>
<td>2 (quaternions)</td>
<td>177–192 (the first gathering, fols. 177–184, is missing)</td>
<td>Monophonic conductus and Ordinary tropes</td>
</tr>
<tr>
<td>XI</td>
<td>3 (two quaternions followed by a ternion)</td>
<td>193–214</td>
<td>2-part settings for the Ordinary and Proper of the Mass.</td>
</tr>
</tbody>
</table>

97 On which, see Roesner, ‘The Manuscript $W_1$', 347–437.
The codicological structure and musical contents of $W_1$ are set out in Table 1.1. Collections of two-part *organa* for the Office and Mass are copied into the third and fourth fascicles of the book respectively and are ordered according to the liturgical calendar. As Rudolf Flotzinger has noted, the repertory of *organa* recorded across these fascicles generally contains proportionally fewer passages of discant per chant setting as compared to the manuscripts $F$ and $W_2$ – a point several commentators have suggested that might imply the early state of the repertory recorded in this book.  

Looking a little beneath the surface at the organisational principles governing the assemblage of *organa* settings, several factors can be seen to complicate the ordering and arrangement of pieces within fascicles. The third fascicle serves as a particularly revealing example. Here, following a series of Office *organa* arranged in liturgical order, a supplementary collection of two-part pieces, beginning on fol. 22v, can be identified: from this point, two polyphonic settings for the Andrew liturgy (*Vir perfecte* and *Vir iste*), a setting of the gradual *Propter veritatem* (M37), and the Sanctorus trope *Sanctus sanctorum exultation* have been copied by the scribe. Such moments – where pieces diverge from the organisational principles of the rest of the fascicle – I suggest, reveal important information about the process of copying and the intended function of the manuscript. On one level, as Edward Roesner has convincingly demonstrated, these types of discrepancy would appear to indicate that scribes were working from multiple exemplars; moments such as that found on fol. 22v may signal a new layer of material – a new wave of copying – drawn from a different musical source.  

On another, this supplementary addition (one of several identifiable in the book) points to another factor influencing the efforts of scribes in $W_1$, governed by the very pragmatic utilisation of space. Indeed, within this fascicle, and more generally throughout the book, scribes arrive at innovative solutions to issues of page layout – to the extent that they seem to have adapted musical settings to better fit onto the page – even if this compromised the liturgical ordering of a fascicle. Read this way, observations about the working methods of scribes and the disposition of *organa* within these fascicles seem to support an argument that $W_1$ was conceived of as a book to be used, where its layout and the arrangement of materials indicates less a concern for external appearance, and more, a desire to collect as much music as possible within its pages.

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98 Flotzinger notes that there are roughly 2.5 sections of discant per *organum* in $W_1$ compared to 3.2 in $W_2$ and 3.5 in $F$. See Der Discantussatz, 40.


100 Roesner, ‘Who “Made” the Magnus Liber’, 252.
As well as discant passages within *organa*, \(W_1\) also contains collections of *clausulae* which are spread over two fascicles of the book: the fifth fascicle – with a missing middle bifolio – contains thirty-four pieces; the sixth fascicle (one of the undecorated fascicles) contains sixty-eight pieces. Both fascicles are organised according to the same liturgical cycle, combining settings for the Office and Mass together; fascicle V also contains a small supplementary series of four *clausulae*, beginning on fol. 54\(v\), which are themselves copied in liturgical order. Several features can be seen to distinguish the collections from one another: as Edward Roesner observes, for instance, fascicle V transmits no unica, but fascicles VI contains eight unique works.\(^{101}\) Further, none of the *clausulae* in the fifth fascicle are found in the organa of fascicles III and IV, but two of the compositions in fascicle VI occur within this part of the book. And though the liturgical series of each of the *clausulae* fascicles is the same, and distinct from the series found within the *organa* fascicles of \(W_1\), the overall differences between the fascicles of *clausulae* likely indicate that the collections represent at least two prior exemplars. The two settings that are copied in both fascicles – a *clausula* on *TANQUAM* (fol. 49\(r\) I and fol. 55\(r\) IV) and one on *DOMINUS* (fol. 49\(v\) V and 55\(v\) III) – appear to substantiate this claim. The differences between versions – notationally, orthographically, and, in the case of the *DOMINUS clausula*, pronounced differences in melodic material – likely indicate that fascicle VI cannot be copied from the same exemplar as fascicle V.\(^{102}\) Rather, this second fascicle of *clausulae* (the work of the second scribe) appears to have been drawn from a different set of materials, though it would appear that they must relate to the exemplar of the fifth fascicle quite closely, and that a consistent mode of organisation obtains across both fascicles.

It can be said, therefore, that the collections of discant within *organa*, as well as the *clausulae* in \(W_1\), have been copied with a clear organisational scheme directing the work of scribes, and that this scheme has been used consistently across fascicles. While a number of discrepancies in the organisational plan can be identified, indicative of a complicated (or progressive) process of compilation governed by a number of different organisational priorities, their presence cultivates a view that \(W_1\) was designed for the functional use of musicians. Stated plainly, \(W_1\), though clearly an anthology book, designed to collect and record a large portion of this musical practice, was also a book conceived of for regular use, and strategies of assemblage reflect this broader intention on the part of its makers.

\(^{101}\) Roesner, ‘The Manuscript \(W_1\)’, 63.

\(^{102}\) For a detailed discussion of the differences between the two settings, see ibid., 64.
Produced in Paris, probably in the 1240s, F is a beautifully made music manuscript largely dedicated to polyphonic composition – to *organa*, *clausulae*, and Latin motets – as well as monophonic and polyphonic conductus and refrain songs. Copied onto fine vellum, it was notated by a single, highly-skilled music scribe and is richly decorated, containing one full-page miniature and thirteen historiated initials. Much larger and more comprehensive than any of the other collections of polyphonic repertories associated with Paris, F stands as the product of a significant anthologising campaign – created, seemingly, in order to collect and physically record everything that might represent a Parisian musical practice of previous decades. Indeed, the book contains over a thousand pieces spread across its eleven fascicles, reflecting what some commentators have characterized as a ‘summatic attitude’ or a ‘monumentalizing tendency’ towards the musical tradition it seeks to preserve. Put plainly, F bears witness at once to the prestige with which this music was viewed in the thirteenth century, and also – in its material form – to the new kinds of relationships established between music and literary practices in the writing down of these polyphonic repertories.

But such maximalist ambitions not only shaped the kinds of material to be included in the book; they also impacted upon its physical characteristics. Gatherings within F, for example, are much bigger than any other manuscript source of this music – typically comprised of between seven and eleven bifolios – and the original form of the book was, conceivably, substantially larger than the state in which it survives today since several of its

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103 On questions of date see Rebecca A. Baltzer, ‘Thirteenth-Century Illuminated Miniatures and the Date of the Florence Manuscript’, *Journal of the American Musicological Society* 25 (1972), 1–18; Everist, *Polyphonic Music in Thirteenth-Century France*, 81–2; and Roesner, *Introduction to the ‘Notre-Dame Manuscript’*, F, 20–1. More recently, Barbara Haggh and Michel Huglo have proposed that F may have been created for the Sainte-Chapelle to mark its solemn dedication on 26 April 1248; see ‘Magnus liber – Maius munus’, 193–230. On its present location and its appearance in the library of Piero di Cosimo de’ Medici, see Masani Ricci, *Codice Pluteo 29.1 della Biblioteca Laurenziana di Firenze: Storia e catalogo comparativo* (Pisa, 2002), 34–43.

104 Only two later additions within the sixth fascicle (fols. 252v–254v) and one in the tenth fascicle (fol. 451r) are obviously in a different hand. It may also be that both the music and the text were copied by the same person, though no detailed palaeographic study of the book has been published.


108 By means of comparison, gatherings in W, are primarily formed of quaternions.
showing little sign of wear or damage (aside from these lacunae), F survives in excellent condition and it would appear that this book was not intended for any sort of practical use by performers. Indeed, in several instances, the layout of the pieces on the page would render their performance directly from it an impossibility. Rather, the high quality of workmanship and the scope of its contents imply that the book was conceived instead as a grand archival project – created more for the sake of posterity than as a record for regular use.

Table 1.2  The organisation and contents of fascicles in F

<table>
<thead>
<tr>
<th>Fascicle</th>
<th>Folio nos.</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>1–13</td>
<td>Two 4-part organa; one 4-part clausula; three 4-part conductus; nine 3-part clausulae</td>
</tr>
<tr>
<td>II</td>
<td>14–47</td>
<td>3-part organa and clausulae</td>
</tr>
<tr>
<td>III</td>
<td>65–98</td>
<td>2-part organa for the Office including Benedicamus Domino settings</td>
</tr>
<tr>
<td>IV</td>
<td>99–146</td>
<td>2-part organa for the Mass</td>
</tr>
<tr>
<td>V</td>
<td>147–84</td>
<td>2-part clausulae</td>
</tr>
<tr>
<td>VI</td>
<td>201–62</td>
<td>3-part conductus; two 3-part textless polyphonic settings</td>
</tr>
<tr>
<td>VII</td>
<td>263–380</td>
<td>2-part conductus</td>
</tr>
<tr>
<td>VIII</td>
<td>381–98</td>
<td>3-part monotextual Latin motets</td>
</tr>
<tr>
<td>IX</td>
<td>399–414</td>
<td>2-part Latin motets; 3-part Latin double motets</td>
</tr>
<tr>
<td>X</td>
<td>415–62</td>
<td>Monophonic Latin conductus</td>
</tr>
<tr>
<td>XI</td>
<td>463–76</td>
<td>Monophonic Latin refrain songs</td>
</tr>
</tbody>
</table>

109 A ready overview of the arrangement and contents of F in its present state can be found in Edward Roesner, ‘Introduction’, Le magnus liber organi de Notre-Dame de Paris I, lxx–lxxi.

110 This is particularly apparent in the motet fascicles. See, for example, the beginning of the first motet fascicle (fol. 381'), in which the opening of the upper voices for the motet Formam hominis is copied on the recto while the whole tenor is copied on the verso. For another argument against the use of deluxe manuscripts in performance, see Everist, French Motets in the Thirteenth Century, 9–10.

111 In this regard, and calling to mind Emma Dillon’s eloquent suggestion that medieval manuscripts not only stand ‘as conduits of text but as objects whose materials inflect the reception of the things they contain’, F invites consideration as an archive of music, and also of written gesture, of human contact, and of physical artefacts, each of which modulate our understanding of the manuscript as an object (Dillon, ‘Music Manuscripts’, 292). For more on this historical ‘loquacity’ of medieval manuscripts, see also Curran, ‘Writing, Performance, and Devotion’, 193–220.
Passages of two-part clausulae can be found spread across three of the eleven fascicles of F: fascicles III, IV, and V, as shown in Table 1.2. The third fascicle contains thirty-four settings of organa for the Office, organised by liturgical calendar, with chants of the temporale and sanctorale combined into one series. Following the setting of the responsory Terribilis est locus iste (O31), a group of nineteen settings for the Benedicamus domino have been included in the fascicle, after which, three additional Office organa (themselves in the correct liturgical order, from O32–O34) are copied. F’s fourth fascicle follows largely the same organisational principles as the third, with the addition of an Alleluia for the Octave of Ascension after the gradual Locus iste (M58) as the final organa setting of the fascicle. Notably, both fascicles can be seen as distinct from organa collections in other manuscripts in several regards, reflecting the different liturgical schemes and practices that particular scribes sought to represent, and the intended function of these books. Most obviously, such a point is manifested in the scope and comprehensive ambition of F’s collection, so that polyphonic settings for feasts not recorded in other manuscripts – including several Vespers chants, processions, and Octaves of feasts, as well as new polyphonic settings of doxologies and repetendum sections – are now included among its pages.

The clausula fascicle of F (fols. 147r–184v), in its present state, is formed of two gatherings (comprised of ten bifolios and nine bifolios respectively); a further gathering at the end of the fascicle is now lost. Within the fascicle, clausulae are arranged in six distinct series – an organisational plan well noted by commentators since it was first reported by Friedrich Ludwig in his Repertorium:

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112 In addition, there is a two-part setting of the melisma TANQUAM in the second fascicle (fol. 10v). On this clausula see Bradley, ‘Contrafacta and Transcribed Motets’, 55–57.

113 An original foliation series makes clear that this was comprised of eight bifolios.

114 Friedrich Ludwig, Repertorium. 79–96. This plan has been further clarified by Smith in ‘The Clausulae of the Notre Dame School’. Existing studies present two different numberings of clausulae. Here I follow the system used by Baltzer in Le magnus liber organi de Notre-Dame de Paris V. A discrepancy arises where other catalogues, such as Smith, ‘The Clausulae of the Notre Dame School’; Rudolf Flotzinger, Der Discantussatz, and van der Werf, Integrated Directory of Organa, Clausulae, and Motets, interpret clausula no. 60 as two separate pieces due to its setting of consecutive chant segments SURGE and ET ILLUMINARE. In support of Baltzer’s interpretation, the setting of ET ILLUMINARE is not provided with text, nor is it transmitted independently within manuscript sources. A converse situation arises with clausulae nos. 236–7, which are considered by Baltzer as distinct pieces, whereas other catalogues view them as a single item (again, they set consecutive portions of chant: DOMINO and QUONIAM). That each clausula is furnished with individual illuminated initials, however, appears to suggest that, at least at the point of copying, they were recognised as two separate settings. In consequence, where there was a deviation between the numbering within catalogues which started at clausula no. 60, from this point on in the fascicle all catalogues agree.
Of the six series preserved within the fascicle, four are disposed according to a liturgical order, with each containing several distinguishing features. The first, comprising a total of 202 clausulae, is by far the largest of these collections. Unparalleled in size, the series is also distinctive in its organisation of material. As the only ordered series that combines clausulae for the Office and Mass, the collection is not only set apart from the rest of the fascicle, but it is also distinct from the organisation of the two-part organum repertories in $F$, $W_1$, and $W_2$, which all separate the repertory into either Office or Mass collections. Nevertheless, this first clausula series adopts the same liturgical plan as that which obtains within organa dupla repertories in $F$ – a plan that is shared also with the second ordered series of the clausula fascicle.

By contrast, the third and fourth ordered series of clausulae, for Office and Mass respectively – consisting of so-called ‘abbreviation’ or ‘mini’ clausulae – follow a somewhat different organisational scheme. In particular, liturgical melodies that have been treated for named feasts of the sanctorale elsewhere in the fascicle are here treated as chants for the Common of Saints, or, indeed, vice versa: that chants for the Common of Saints in organum fascicles or earlier clausula series are represented here as proper chants, specific to saint’s feasts. This subtly different liturgical arrangement is amplified further by the musical differences discernible between these settings and other clausula series. Not only are pieces in these collections distinctly shorter than others within the fascicle – tenors are typically formed of only a few pitches – but, as Catherine Bradley has demonstrated, they are often

<table>
<thead>
<tr>
<th>Organisation of clausulae</th>
<th>Folio nos.</th>
<th>Clausula nos.</th>
</tr>
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<tbody>
<tr>
<td>First ordered series for Office and Mass</td>
<td>147r–170v</td>
<td>1–202</td>
</tr>
<tr>
<td>Unordered series for Office and Mass</td>
<td>170v–172v</td>
<td>203–26</td>
</tr>
<tr>
<td>Second ordered series for Mass</td>
<td>172v–178v</td>
<td>227–88</td>
</tr>
<tr>
<td>Third ordered series for Office</td>
<td>178v–180v</td>
<td>289–342</td>
</tr>
<tr>
<td>Fourth ordered series for Mass</td>
<td>180v–183v</td>
<td>343–442</td>
</tr>
<tr>
<td>Unordered series for Office and Mass</td>
<td>183v–184v</td>
<td>443–62</td>
</tr>
</tbody>
</table>

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115 This ordering combines temporal and sanctoral cycles, with settings which must represent the common of saints placed at the end of the latter.

116 As Baltzer has noted, the presentation in a single cycle of Office and Mass pieces corresponds to the organization of the three-voice organa fascicle of $F$ – something which may indicate the ‘slightly younger’ nature of these collections. See Baltzer, *Le magnus liber organi de Notre-Dame de Paris V*, xlv.

117 For a discussion of this terminology see Bradley, *Polyphony in Medieval Paris*, 49–80.
also based on portions of chant that receive little or no attention in earlier parts of the book, sometimes copied at different transpositions, with text often unconventionally underlaid.\textsuperscript{118} Thus, while these \textit{clausulae} seem to have been considered important enough to be included within the book by the scribe, it would appear that, both on an organisational level and a musical one, these two series point towards a different kind of repertorial tradition being preserved here – though one with many features shared with repertory in other parts of the book.

Two further series of \textit{clausulae} within the fascicle exhibit no particular liturgical ordering at all. Relatively small in volume, the contents of these collections are typically considered as ‘supplements’ to larger, ordered series in scholarship, primarily on account of their lack of organisation.\textsuperscript{119} Their presence in a book that seems especially concerned with the careful presentation of material, however, remains to be explained, and the musical characteristics of pieces within these collections only add to their curiosity. For example, the first unordered series contains a significant number of settings (fourteen of the twenty-four pieces) in an \textit{organum purum} style rather than in a discant style typical of \textit{clausulae}. Both unordered series also include settings of chants that do not belong to the corpus of liturgical melodies that appear to constitute the \textit{magnus liber organi} as used at Notre-Dame-de-Paris\textsuperscript{120} – one setting in the first series, and three in the second come from chants for which no \textit{organa} survive.\textsuperscript{121} Whether these unordered series are to be viewed as \textit{clausulae} that could not be included in earlier series or, perhaps more likely, as representing distinct layers of copying in themselves, the fact that the scribe copied these pieces in the way that he did is telling. For in this regard, it seems, the two unordered series speak quite directly to the scribe’s anthologising tendency. That is, in their organisation (or lack thereof), as well as their musical characteristics, these sections not only begin to articulate a codicological priority of exhaustive collection over the navigability of pieces; they also make clear the scribe’s maximalist ambition that sees even the inclusion of pieces which apparently lie beyond the repertorial tradition of the Cathedral’s \textit{magnus liber}.

\begin{flushleft}
\textsuperscript{118} \textit{Ibid.}, 77.
\textsuperscript{119} See, for example, Friedrich Ludwig, \textit{Repertorium}, 90; Smith, ‘The \textit{Clausulae} of the Notre-Dame School’, 14; and Baltzer, \textit{Le magnus liber organi de Notre-Dame de Paris V}, xliv.
\textsuperscript{120} For an outline the contents of this \textit{magnus liber organi} repertory, see Wright, \textit{Music and Ceremony}, 259–62.
\textsuperscript{121} These are \textit{clausulae} nos. 224, 455, 456, and 457. On this issue see Norman E. Smith, ‘Some Exceptional \textit{Clausulae} of the Florence Manuscript’, \textit{Music & Letters} 59 (1973), 405–14.
\end{flushleft}
So, it would seem, the liturgical ordering of material within the six distinct clausula series is far from uniform; rather, and in resonance with Edward Roesner’s observation of F, we find that ‘a variety of organisational plans are at work’.\(^{122}\) These multiple plans bespeak a complex compilatory effort in which several layers of copying within the fascicle – and perhaps, too, several musical traditions – can be distinguished. In other words, the size and scope of the collections, organised into distinct codicological layers, argues for multiple exemplars being drawn upon by the scribe as he was copying, representative of the work of many musicians. Moreover, in the process of collecting this musical material, the scribe not only sought to garner everything that might represent this repertory within the fascicle (and in so doing create a book of encyclopedic ambition); he also attempted to portray this polyphonic repertory in a very deliberate way. In consequence, each series can be seen to have its own stylistic character articulating a motivation of the scribe to cultivate a particular impression of the repertory he was copying.\(^{123}\)

Perhaps such aesthetic notions are most clearly observable in the first series of clausulae – a collection that contains some of the most sophisticated pieces, often based on the longest, most elaborate portions of chant melodies that constitute the magnus liber organi repertory. For one, the impression gained from this series is of comprehensiveness: in its size, the collection constitutes almost half of the entire musical contents of the fascicle. And within this series we find copied numerous different polyphonic responses to a single melisma – often on a scale far beyond that which might actually have been used by one group of musicians – demonstrating an extraordinary range of rhythmic, melodic, and contrapuntal possibilities in this polyphonic context. Almost half of the chant melodies included in this part of the fascicle are subject to at least two different renderings in polyphony. For another, the impression is of compositional prestige; it would appear that the scribe sought to begin the fascicle with what might have been viewed as some of the most impressive compositions – and perhaps the most recently made pieces – he was able to find. One measure of such prestige might be in the number of pieces that do not simply state the chant melody once but make use of the practice of tenor repetition; a compositional technique that, at its heart, reflects a desire to make longer, more complex musical settings than necessitated by

\(^{122}\) Roesner, Introduction to the ‘Notre-Dame Manuscript’ F, 25.

\(^{123}\) One example of this idea may be identified in the possible presence of transcribed motets, as well as motet concordances within the clausula fascicle. See, as a starting point, Bradley, ‘Contrafacta and Transcribed Motets’, 1–70.
liturgical function. In this regard, of the 129 clausulae in the fifth fascicle that bear witness to this technique, ninety are copied within the first series; one setting, upon the chant melisma OMNES from the Christmas gradual Viderunt omnes even repeats its tenor a total of nine times. And pointing further to this idea, this first series also has a near monopoly on motet concordances within the clausula fascicle – a layer of the repertory that most likely belongs to the more recent musical past.

The desire, on the part of the scribe, to portray aspects of the clausula repertory in this considered way illustrates that, even within individual clausula series, a number of different organisational plans and priorities may be operating simultaneously, each helping to cultivate a particular reading of the book and its musical contents. Interestingly, a frequent consequence of these concurrent systems for arranging material is the appearance of a number of organisational discrepancies – a compromise of choosing one plan over another – across the fascicle. And such organisational compromises prompt us to temper our view of the book’s highly organised structure in such a way as to account both for the breadth of materials drawn upon and the multiplicity of strategies for arranging this material within the fascicle. But these moments also offer a window into the scribe’s copying process within the fascicle and the kinds of decisions he made when assembling its musical contents in ways that directly link the process of copying to the clearly historicising expression of this repertory within the book. In such moments we find evidence of a very deliberate interpretation of the musical repertory being preserved – a scribal agency that not only seeks to document everything viewed as within the purview of this Parisian musical practice, but to

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125 This is the clausula on fol. 149r II of F.


127 On which, see Adam Mathias, ‘Collecting Clausulae, Shaping the Past’, in Sounding the Past.
present it in a format that appears comprehensive. The construction and portrayal of a musical past for this polyphonic repertory thus appears deeply bound to the copying process of the scribe. Accordingly, the scribe affords various aspects of this repertory particular prominence within the book – most notably, a desire to include some of the most ‘up-to-date’ compositions at the beginning of the clausula fascicle. But many other, less immediately visible, repertorial connections can also be drawn out through a close examination of the fascicle’s organisation, and in many cases, codicological discrepancies often go hand in hand with musical differences. One reason why the fascicle’s musical contents were arranged and presented in such a way, therefore, may have been because of a self-conscious recognition of what a musical past meant to its compilers, and, moreover, how this past should be preserved for posterity.

\textit{W}2 – \textit{Wolfenbüttel, Herzog August Bibliothek, Guelf. 1099 Helmst.}

The manuscript \textit{W}2 dates from the mid-thirteenth century, a little after \textit{F} and \textit{W}1, but possibly before 1250.\textsuperscript{128} Containing substantial collections of \textit{organa}, conductus, and motets, the book is comprised of ten fascicles, and is probably of Parisian origin. Like \textit{W}1 and \textit{F}, \textit{W}2 can be described as a large anthology book dedicated principally to polyphonic composition. In its contents and its organisational principles, however, the book can be seen to differ from other Notre-Dame sources in several important regards, these differences in turn encouraging a greater nuance in the characterisation of these big compendium volumes. Musically, \textit{W}2 contains several collections of French motets that are not found in \textit{W}1 and \textit{F}, and these pieces, as well as collections of Latin motets in some portions of the book have been arranged into alphabetical order – a new mode of organisation for this type of manuscript. \textit{W}2, it would seem, was also far more of a compilatory effort – the work of a number of scribes – than other Notre-Dame manuscripts: Mark Everist has suggested as many as seven scribes

\textsuperscript{128} Edward Roesner has in several places suggested a dating close to \textit{F}, in the 1240s. See, for example, \textit{Le magnus liber organi de Notre-Dame de Paris I}, lxxi; and Roesner, \textit{Introduction to the ’Notre-Dame Manuscript’} \textit{F}, 14. For other accounts of the dating of \textit{W}2, see Mark Everist, \textit{Polyphonic Music}, 108–9 and Thomas B Payne, ‘Introduction’, in Payne, ed., \textit{Le magnus liber organi de Notre-Dame de Paris VI A–B}. 
working separately on the book, with the result of a number of discernible layers of copying across the book as a whole that speaks to a complex process of assemblage.\textsuperscript{129}

Discant passages of liturgical polyphony for two voices are to be found only in the book’s fourth and fifth fascicles – the work of a single scribe – which contain organum settings for the Office and Mass respectively. Unlike $W_1$ and $F$, however, $W_2$ contains no separate collections of clausulae – the only exception to this is the four-voice setting of the MORS melisma copied in fascicle I (fol. 5'). An overview of the organisation of the contents of $W_2$ is presented in Table 1.3. Fascicle IV contains fifteen organa settings, while fascicle V, the larger of the two, contains thirty-five: thirty for the Mass, one set on the Easter processional antiphon Crucifixum in carne, and four settings of Benedicamus domino chants. Apart from these additions at the end of the fifth fascicle, the fascicles are tightly organised according to the liturgical calendar, with settings for the common of saints placed at the end of the cycle.

<table>
<thead>
<tr>
<th>Fascicle</th>
<th>Folio nos.</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>1–5</td>
<td>4-part organa (fragmentary), one 4-part clausula</td>
</tr>
<tr>
<td>II</td>
<td>6–30</td>
<td>3-part organa</td>
</tr>
<tr>
<td>III</td>
<td>31–46</td>
<td>3-part conductus</td>
</tr>
<tr>
<td>IV</td>
<td>47–62</td>
<td>2-part organa for the Office</td>
</tr>
<tr>
<td>V</td>
<td>63–91</td>
<td>2-part organa for the Mass; one 2-part processional antiphon; four Benedicamus domino settings</td>
</tr>
<tr>
<td>VI</td>
<td>92–122</td>
<td>2-part conductus</td>
</tr>
<tr>
<td>VII</td>
<td>123–144</td>
<td>3-part Latin motets; 3-part French motets; 2-part conductus</td>
</tr>
<tr>
<td>VIII</td>
<td>145–192</td>
<td>2-part Latin motets; one Latin double motet; one monophonic conductus; four organum prosulae</td>
</tr>
<tr>
<td>IX</td>
<td>193–215</td>
<td>3-part French motets</td>
</tr>
<tr>
<td>X</td>
<td>216–253</td>
<td>2-voice French motets</td>
</tr>
</tbody>
</table>

\textsuperscript{129} Everist, \textit{Polyphonic Music}, 101. At the same time, the tripla and dupla appear to be the work of one scribe, and Payne has described the manuscript as ‘a model of painstaking scriptorial planning and scribal execution’ (Payne, ed., \textit{Le magnus liber organi de Notre-Dame de Paris VI A}, lxvi).
Of the discant passages preserved in the *organa* of fascicles IV and V, around 160 in total, a significant number of concordances with the repertory recorded in other manuscripts, and in particular, *F*, can be identified. In a comparison of discant settings across the three main Notre-Dame sources, Rudolf Flotzinger noted that twenty-two of *W*₂’s *clausulae* are also to be found in the *clausula* fascicles of *W*₁, thirty-three among its *organa* fascicles, twenty-eight in fascicle V of *F*, and 136 in *F*’s settings of *organum*. This is revealing on several counts. For one, it speaks to a musical practice characterised by interconnection and concordance, where ways of singing a portion of chant in polyphony became known and shared by musicians across institutional contexts with an apparent consistency. For another, it also begins to shed light on the materials and musical styles that came to be collected in such a book as *W*₂, and the possible connections that can now be drawn between surviving manuscripts. And though the question of why pieces were selected by scribes to be recorded in *organa* or as a separate *clausulae* is one that remains to be answered, the striking concordance in the repertory of *organa* documented in *F* and *W*₂ may point to a close relationship between the musical materials drawn upon in the process of copying (in whatever form those materials might have taken) and by extension, between the musical practices represented by these books.

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130 Flotzinger, *Der Discantussatz*, 41.
II. Below

1. Approaches to Tenor Voices

How did creators of clausulae transform portions of pre-existent plainchants into rhythmically measured polyphonic tenors? What kinds of compositional strategies and techniques were involved in deciding upon a tenor’s rhythmic design? And what might be discovered about these compositional processes if one compared tenor melodies with contemporaneous plainchant sources? This chapter investigates questions of this sort, concerning the relationship between chants and clausula tenors, in order to offer a new account of the practices of musicians who made this polyphonic repertory and the ways they viewed their underlying plainchant materials. In so doing, it will attempt to uncover and explain some of the similarities – and differences – between practices of singing chant recorded within twelfth- and thirteenth-century Parisian chant books and the polyphonic foundations of clausula settings. More, it will explore how certain features of chant melismas may be newly articulated and exploited for compositional ends by means of their being rendered in rhythmic measure. As will become clear, the compositional efforts recorded within surviving manuscripts present a kaleidoscopic array of opportunities for handling a chant melisma; these representatives of the repertory speak to a diverse and imaginative engagement with pre-existent liturgical melodies. In what is to follow, I investigate this compositional heterogeneity, questioning what it might say about the treatment of chant in this polyphonic context. But first, to set out a frame of scholarly reference, I begin by reflecting on the ways modern writers have approached the study of these polyphonic foundations, considering the implications of this scholarship for the type of analytical work I seek to undertake.

Given the sheer scope and variety of extant clausula collections, it would appear that singers clearly delighted in working out compositional possibilities presented by the chant melismas they set in measured rhythm. Across the repertory, it seems, they sought to experiment with an array of different ways to divide up a melisma into smaller melodic units, devising numerous strategies for organising their material in measured, proportional units of time. Since the earliest repertorial studies devoted to clausulae, scholarship has analysed these different compositional strategies for formulating a polyphonic tenor against the backdrop of this culture of musical creativity, in terms that emphasise the underlying
experimental ambitions of its creators.\textsuperscript{1} Norman Smith perhaps set the tone for discussion in his 1964 dissertation, speaking of what he saw as new ‘purely artistic considerations’ influencing the creation of clausulae quite beyond notions of liturgical function.\textsuperscript{2} Rebecca Baltzer, too, advocated for a similar view in her early work on the rhythm and notation of clausulae, proposing that the repertory provides ‘an excellent laboratory for working out different possibilities of rhythmic, notational, contrapuntal, and formal organization in discant.’\textsuperscript{3} This is a conception now so widely acknowledged that it has entered into broader historical surveys of medieval music as well, recognised as a defining tenet of the clausula repertory. In The Oxford History of Western Music, for example, Richard Taruskin – provoked by the musical variety of one particular group of clausulae based upon the same portion of chant – comes to the conclusion that ‘just about anything can happen in these playfully (‘artfully’) imaginative discants’.\textsuperscript{4}

Attending to this creative strain of the repertory, most clearly discernible in the multiple different ways recorded in manuscripts of singing the same chant melisma, a number of studies have devoted energy to analysing the rhythmic arrangement of tenors for what they may say about issues of compositional development. At the heart of this approach is the premise that tenor voices constituted the structural basis of polyphonic settings, to which newly devised upper voices were added in response. Norman Smith, for example, in an analysis of clausulae based on a portion of an Assumption chant, states that ‘it is obvious that the rhythmic structure of a clausula is determined in large part by the rhythmic pattern of its tenor’;\textsuperscript{5} while Edward Roesner speaks of the tenor ‘establishing a firm structural foundation

\begin{enumerate}
\item For one detailed consideration of this musical culture see Susan Rankin ‘Thirteenth-Century Notations of Music and Arts of Performance’, in Andreas Dorschel & Andreas Haug, eds., Vom Preis des Fortschritts: Gewinn und Verlust in der Musikgeschichte, Studien zur Wertungsforschung 49 (Vienna, 2008), 110–41.
\item Norman Smith, ‘The Clausulae of the Notre Dame School: A Repertorial Study’, 2 vols. (Ph.D. diss., Yale University, 1964), i, 56. In particular, Smith was interested here in clausula settings constructed upon two or more statements of a chant melisma.
\item This is the REGNAT melisma from the chant Alleluia V. Hodie Maria. See Norman Smith ‘An Early Thirteenth-Century Motet’, in Mark Everist, ed., Models of Musical Analysis: Music Before 1600 (Oxford, 1992), 20–41.
\end{enumerate}
on which to craft the duplum’.

However, this underlying premise is one I find worthy of more sustained consideration and questions about it will re-emerge at several points in what is to follow. For while the structural significance of the tenor in shaping musical features of a clausula as a whole can hardly be doubted, my analyses will come to suggest a greater degree of interaction between the compositional designs of duplum and tenor voices than is currently acknowledged. The observation that an upper voice may have been able to collaborate with and influence its tenor in order to determine the structural design of a clausula is one I will take as an opportunity to contemplate anew some of the more interconnected compositional processes at work within the repertory.

So far, however, scholarly engagement with clausula tenors has focussed more on questions of chronology than on compositional process. Taking its cue from a vein of scholarship devoted to tracing the development of the modal system, such work has sought to interpret particular rhythmic patterns of tenors as indicators of possible chronological layers of clausula collections preserved within manuscripts. Special interest, in this regard, has been paid by studies attempting to connect various strands of the repertory with the styles and time periods of Leoninus – described in the testimony of Anonymous IV as an ‘excellent

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organista’ – and Perotinus, who ‘made many better clausulae’.⁹ But if we are to accept existing accounts of the development of the modal system, interpretation of exactly what might distinguish Perotinus’s ‘better clausulae’ from Leoninus’s for the late-thirteenth-century theorist certainly remains a matter of contention for modern writers.¹⁰ Some have treated these comments, along with Anonymous IV’s remark that Perotinus ‘produced a redaction’ [abbreviavit eundum] of Leoninus’s work, as suggestive of a process of shortening and abridging within the repertory, and that evidence of this work is to be found in the fourth and fifth series of clausulae in fascicle V of F.¹¹ But it is also understood, as Edward Roesner posits, that the theorist was thinking of ‘the sophisticated and lengthy clausulae composed to replace other discant sections and often transmitted in the collections of independent clausulae’¹² – those more compositionally ambitious settings of long melismatic plainchant tenors ‘with structure, rhythmic architecture, and expansiveness of design.’¹³

One early example of a study espousing this approach can be found in William Waite’s The Rhythm of Twelfth-Century Polyphony. In his characterisation of rhythmic modes and their notation, Waite argues for ‘the development of the indeterminate succession of tenor notes of Leonin into the rational fifth mode of Perotin’ – in other words, a move from tenor ordines of variable length, formed of longs or greater durational values, to more regular, periodic tenor designs.¹⁴ Subsequent scholarship set out to explore this chronological model more extensively: comments about the use of particular tenor designs here have mostly addressed connections between rhythmic patterns and layers of compositional activity born


¹⁰ A starting point for this debate can be found in Edward Roesner, ‘Who “Made” the Magnus Liber?’ Early Music History 20 (2001), 227–66, at 228–229.


¹³ Ibid., 378.

¹⁴ William Waite, The Rhythm of Twelfth-Century Polyphony, 47.
out of this developmental narrative. On this, Rudolf Flotzinger, for instance, proposed that the first steps of this chronology can be traced in the creation of phrases built from tenor *maximae*, but the desire for more rational arrangements of pitches, and a move from random to schematic tenor designs, quickly followed.\footnote{Rudolf Flotzinger, *Der Discantussatz im Magnus liber und seiner Nachfolge*, Wiener musikwissenschaftliche Beiträge 8 (Vienna, 1969), 141. ‘erste Schritte in dieser Richtung sind… die Gruppenbildungen bei den Tenormaximae…, doch ist das Bedürfnis nach rationale Erfassung von zufällig über spielerisch bis schematisch sehr früh sichtbar’. Flotzinger later goes on to explore the ‘paradigm shift’ between the compositional styles associated with Leonin and Perotin in *Von Leonin zu Perotin: Der musikalische Paradigmwechsel in Paris um 1210* (Bern, 2007).} Fritz Reckow has also suggested a gradual move from free-flowing ‘un-modal’ passages to more strictly measured discant tenors, attempting to chart this change through *organum* and *clausula* examples preserved within manuscripts.\footnote{Fritz Reckow, ‘Das Organum’, in Wulf Arlt, Ernst Lichtenhahn, and Hans Oesch, eds., *Gattungen der Musik in Einzeldarstellungen I: Gedenkschrift Leo Schrade* (Bern, 1973), 457–65; musical examples at 469–470.} Elsewhere, in her introduction to the volume of *clausulae* transcribed for the *Magnus liber* edition, Rebecca Baltzer has claimed ‘that the earliest examples of the genre are those with tenors in ternary longs, in duplex longs, and in the fifth rhythmic mode; the younger repertory includes discant with tenors in the third mode, the first mode, and the second mode (in that general order of development).’\footnote{Rebecca Baltzer, ed., *Le magnus liber organi de Notre-Dame de Paris V, Les clausules à deux voix du manuscrit de Florence, Biblioteca Medicea-Laurenziana, Pluteus 29.I, fascicule V* (Monaco, 1995), xlii.}

But Baltzer herself recognised some of the difficulties associated with determining repertorial layers of *clausulae* based on their tenor arrangements, confessing ‘a certain amount of overlapping involved in this chronology’,\footnote{Ibid.} and the work of other scholars has encouraged a more nuanced approach to such analysis. Here, Edward Roesner has persuasively argued that the rhythmically measured patterns deployed across *clausula* tenors probably ‘developed over an extended period of time and at the hands of numerous musicians’;\footnote{Roesner, ‘The Emergence of Music Mensurabilis’, 62.} warning that ‘liturgical, palaeographical, and stylistic tools need a great deal of sharpening to aid in identifying layers of compositional activity.’\footnote{Roesner, ‘The Problem of Chronology’, 398.} Additionally, in an examination of interrelationships among tenor melodies of the *Magnus liber*, Norman Smith has demonstrated the often complex networks that bind polyphonic settings together, uncovering an evident flexibility in the ways that *clausula* settings of chant melismas were
known and shared. What some commentators have perceived as earlier or later tenor
designs, therefore, may not only be limited to discrete layers of the repertory but were more
probably used quite freely by singers over a period of several decades. Moreover, the
surviving collections of these settings, in which contrasting tenor formulations can often be
found side-by-side in manuscripts, have been compiled in ways that make chronological
distinctions within the repertory all the more challenging.

Some other accounts treat tenors in less chronological terms. While the preliminary
processes involved in moving between chant and discant tenor have not been subject to any
sustained scholarly attention, work on the repertory of organum by Fritz Reckow suggests
ways that analysis may take into account potential differences in the use of chant between
monophonic and polyphonic practices. Arguing for a growing conceptual difference in the
treatment of melismas in polyphony as compared to chant, Reckow asserts that ‘the structure
[of a polyphonic setting] is directed, to a certain extent, by the nature of the chant, but it is
also increasingly proving to be the result of autonomous compositional planning, which,
thanks to the constant refinement of compositional technique and rhythm, becomes more and
more evident in detail.’ Eloquently put, Reckow here sets out a dynamic between chants
and polyphonic tenors in which a melisma, arranged as the foundation of a clausula, may be
treated much more as ‘musical material’ than as a fixed liturgical melody. A similar
recognition of the changing perceptions of chant within clausula tenors can also be found in
Norman Smith’s study of settings that make use of multiple statements of a chant melisma.
‘For the first time’, Smith proposes, ‘liturgical considerations and requirements recede
somewhat as the pre-existent chant comes to be viewed by the composer as abstract material
for building a structure based upon purely musical considerations.’ And Wulf Arlt, in an
analysis of a clausula in which the repetition of the chant melisma and repetition of the


22 Fritz Reckow, ‘Das Organum’, 448. ‘Die Gliederung richtet sich bis zu einem gewissen Grade nach der Beschaffenheit das Cantus, erweist sich aber zusehends auch als das Ergebnis autonomer kompositorischer Planung, die dank der stetigen Verfeinerung der Satztechnik und Rhythmik auch im Detail immer offensichtlicher wird’.


24 Ibid., 351.
rhythmic pattern operate independently, observes what he describes as the possibility for ‘free compositional engagement with the tenor’. But perhaps because the genre of the motet is more commonly recognised as a locus of compositional ingenuity in the thirteenth century, the potential malleability of plainchant tenors has been better studied within this repertory than in the domain of the clausula. That a chant melody may be stretched and shaped – manipulated, as Dolores Pesce argues, ‘to different tonal ends’, or deliberately reformulated, as Roesner has shown, for ‘structural reasons’ – is viewed as a familiar part of the arsenal of techniques available to motet composers for devising a piece. Indeed, it would seem that motet composers often paid close attention to the harmonic and structural implications as they formulated chants into motet tenors. Examining the range of possibilities for fashioning a chant melisma into a clausula tenor, however, remains an analytical path much less explored. What would it mean to understand this ability to organise a chant melisma in measured rhythm for primarily musical reasons in the context of the clausula repertory? What different organisational techniques can be traced across their tenors, and what aspects of a chant might be seen as particularly favourable for polyphonic composition? In short, what might be learnt from placing chant practices at the centre of a discussion of these plainchant foundations?

Where chant practices and tenor settings of clausulae have been considered together, a principal aim of scholarship has been to hypothesise over the origins and institutional affiliations of layers of the repertory of organum and clausulae. Famously, this line of enquiry was taken up by Heinrich Husmann in arguments surrounding the origin and location


of the reputed *magnus liber organi*. Several articles by Husmann set out to illustrate two distinct layers of this ‘big book’ through an analysis of liturgical and melodic variation among chant practices. Husmann suggested that, while the first layer fitted neatly into the liturgical practice of Notre Dame, ‘corresponding melodically with Antiphonaries and Full Breviaries of the Paris diocese down to the smallest details, even notationally’, his second layer appeared to fit less clearly into the liturgical practice at the cathedral, thus he looked elsewhere for answers. Since then, however, Craig Wright has convincingly demonstrated that the ordering and ‘additional layers’ within the *Magnus liber organi* most likely originate solely from the Cathedral of Notre Dame while also noting that melodic variants among tenor settings of *organa* and *clausulae* are ‘simply too numerous and too complex’ to connect an individual version to a particular church or institution that constituted a Parisian chant tradition.

But arguments of institutional origin are not my concern here. Rather, I wish to use notated records of chant practices as a means of entry into a more serious consideration of compositional process for creating a *clausula* tenor. This resonates with a call made by Margot Fassler, yet to be fully explored by scholarship, for a more careful analysis of polyphonic arrangements of chant in light of their monophonic origins: that ‘Parisian monophonic sources provide an essential counterpart to the study of Parisian polyphony’.

Yet while Fassler’s own emphasis is to do with the relationship between the Parisian sequence and the rhythmic style of *organa* and *clausulae*, I am curious to consider how liturgical chant may have been sung in and around Notre-Dame, and what that may tell us about the kinds of procedures involved in composing a *clausula*. Here, the work of Susan...

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30 In particular see ‘The Enlargement’ and ‘Saint-Germain und Notre-Dame’. Quote from ‘The Origin and Destination’, 319.


Rankin provides an important touchstone for an analytical approach of this kind. Her observation that *LATUS clausulae* make use of a variety of different versions of the chant melisma, beginning on different notes and omitting specific pitches, uncovers a situation in which musical decisions about the particular form of the tenor are evidently being worked out across a *clausula* family.\(^{34}\)

Most recently, Catherine Bradley has taken this approach further and two case studies within her book *Polyphony in Medieval Paris* set out to explore ways that plainchant melodies were deployed within *organa, clausulae,* and motets, apparently for ‘expressly musical’ reasons.\(^{35}\) Here, Bradley argues for greater flexibility in polyphonic uses of plainchant melodies than is often found in thirteenth-century monophonic records. In particular, in an analysis of polyphonic settings on the chant melody *Propter veritatem* – ranging from *organa* to motets – she claims that ‘opportunities for musical freedom… seem key to the popularity of this tenor source throughout the century’.\(^{36}\) She goes on to explore this claim through comparison of polyphonic settings to monophonic sources of the chant, suggesting that ‘the ingenious and sensitive manipulation of pre-existent plainchant in different ways and to different ends’\(^{37}\) might be viewed as indicative of ‘stylised compositional choices’ within these polyphonic settings.\(^{38}\) In an analytical turn towards compositional process, Bradley thus begins the task of investigating fundamental questions concerning ‘how these pieces work’, demonstrating the value of attempting to look at *clausulae* through the lens of compositional process. Paving the way for a more focussed examination of *clausula* tenors, the analytical paradigms afforded by this work serve as an important foundation to the type of investigation I undertake here.

All told, existing studies of *clausulae* tenors have not yet devoted energy to understanding the relationship between these polyphonic foundations and the pre-existent chant being set in measured rhythm. Even those that work from the perspective of compositional process, and in so doing, place less emphasis upon established chronological

\(^{33}\) Susan Rankin, ‘Thirteenth-Century Notations’.

\(^{34}\) *Ibid.*, 127.


\(^{36}\) Bradley, *Polyphony in Medieval Paris*, 45.


\(^{38}\) *Ibid.*, 45.
approaches, remain a rather nascent trend in scholarship. But such a premise serves as the point of departure for this chapter. At its most conspicuous, direct connections and similarities between Parisian chant sources and clausula tenors provide a basis to consider ways musicians may have viewed their liturgical heritage. And a more heightened engagement with this heritage signals a growing recognition and exploration of purely musical aspects of this pre-existent material. This chapter, therefore, seeks to contribute to scholarly discussion by charting the scope of interconnections between monophonic and polyphonic practices. More importantly, over its following five sections, it surveys the range of compositional behaviours across surviving chant manuscripts and clausula settings, proposing that procedures for organising a chant melody into measured rhythm reveal lesser or greater levels of organisation and abstraction in the treatment of pre-existing chant melodies. This analytical focus, in turn, sets out to uncover and examine some of the compositional strategies used by singers in the act of clausula composition, and in so doing, offers fresh insight into the preliminary process of rendering chant into polyphonic tenors.
Before undertaking an investigation into the compositional processes by which creators of *clausulae* fashioned portions of plainchant into rhythmically measured tenors, it is necessary to first consider how such chant materials were known by singers in their monophonic context: to explore what the underlying musical features of such melodies were, how these materials came to be remembered and transmitted by singers, and indeed, what degree of variation these materials may have been subject to as they passed around Paris. In short, a fundamental exercise before examining the treatment of chant across the *clausula* repertory lies in understanding precisely what forms these chant melodies might have taken within a monophonic tradition of chant performance. For, from this basis of knowledge, it is possible to more fully appreciate the kinds of compositional opportunities presented by plainchant melodies in the creative act of devising a *clausula* tenor, and in turn, to understand the ways singers responded to these opportunities in rhythmic measure.

A starting point for this chapter, therefore, is the surviving manuscript sources of chant produced in Paris around the end of the twelfth and the thirteenth centuries. Specifically, my interest in such sources relates principally to how these liturgical melodies were to be performed in the liturgy of the Cathedral of Notre-Dame and its surrounding parishes – a location and a liturgical rite to which the repertory of *clausulae* has a demonstrable connection.\(^\text{39}\) Such a focus is justified because of a pronounced affinity that tenors of *organum* and *clausula* collections evidence – both in terms of liturgical ordering and melodic similarity – to a ‘cathedral-Augustinian corpus of chant’ circulating in thirteenth-century Paris.\(^\text{40}\) In support this approach, the work of several scholars (in particular, Craig Wright) has sought to argue that the tenors of *clausulae* preserved within surviving manuscripts were drawn ‘from a chant tradition unique to the cathedral [of Notre-Dame] and the two Augustinian abbeys [of St Victor and Ste Geneviève]’;\(^\text{41}\) in the case of manuscript *F*, Wright has noted that ‘the succession of pieces in this polyphonic source most

\(^{39}\) For a further argument in favour of this approach, see Michel Huglo, ‘Notated Performance Practices in Parisian Chant Manuscripts of the Thirteenth Century’, in Thomas Forrest Kelly, ed., *Plainsong in the Age of Polyphony* (Cambridge, 1992), 32–44, at 39. Here, Huglo proposes that in such an analysis of chant melodies ‘it is important to consider only Parisian manuscripts to the exclusion of other witnesses of the plainsong tradition’.

\(^{40}\) Wright, *Music and Ceremony*, 248. As Wright notes, the transmission of chants in sources associated with Notre-Dame and the Augustinian houses on Paris’ Left Bank do not contain any notable melodic variants that would enable the identification of one institution’s practice over another’s.

closely agrees with the cycle of chants preserved in the plainsong manuscripts emanating from the cathedral'.

To this end, and in order to more fully understand the kinds of materials drawn upon in this compositional process, the cornerstone of my analysis necessarily based on ways of singing chant that were actively cultivated and promoted around the Cathedral and its local parishes, attested to by their documentation in writing.

That noted, in seeking to recognise something of the range of chant practices in evidence in this thirteenth-century Parisian context, as well as the potential for melodic difference among institutional centres of which singers would no doubt have been aware, this study will also take into consideration a selection of chant books associated with surrounding churches and monastic houses beyond the Cathedral’s practice. The underlying aim of this broader analytical optic is to gain a more representative picture of Parisian chant practices out of which the clausula repertory emerged. Of course, it must also be envisaged that singers and their chant practices would have come from further afield, beyond the walls of Paris, and that many ways of singing chant practised in the city were not always notated, or perhaps, that these notated records simply have not survived; necessarily, a degree of variance ought to be inferred from this unwritten context. Indeed, a recognition of the possible scope of melodic variation among Parisian chant practices serves as an important foundation for an analysis of clausula tenors and a study of the locations and forms of these variants will in turn be applied to the clausula repertory, aiding a better understanding of the ways singers responded to and even experimented with inherent flexibilities of a given chant melody.

But there is more still to be gained from an awareness of aural, sonic aspects of chant in this Parisian context. For though it need not be stated that written sources stand as the principal means of understanding this monophonic practice, it remains to be said that the fundamental sound of a chant is to be viewed as the basis for – and therefore, a determining factor of – its notation. Read this way, a study of source chants from thirteenth-century Paris.

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42 Ibid., 258.

43 Several scholars have also noted potential similarities between the tenors of Magnus liber settings and chant practices of outlying regions such as Sens, Beauvais and Chartres, though such a comparison lies beyond the immediate scope of this study. For more on this issue, see Michel Huglo, ‘Les debuts de la polyphonie à Paris: les premiers organa Parisiens’, in Aktuelle Fragen der musikbezogenen Mittelalterforschung. Texte zu einem Basler Kolloquium des Jahres 1975, Forum Musicologicum. Basler Beiträge zur Musikgeschichte 3 (Winterthur, 1982), 93–163, and Jennifer Roth Burnette, ‘Organizing Scripture: Organum Melos, Composition, and Memoria in a Group of Notre-Dame Responsories’ (Ph.D. diss., New York University, 2010), 31–44. Later Dominican sources of chant are not considered in this study on account of my focus on chant practices that developed contemporaneously with the creation of this clausula repertory.
may shed important light not only on the particular versions of chant melodies that were known and shared by singers, but also how these melodies were conceived of in structural terms and committed to memory. Such records of chant, then, can be seen to offer vital information about underlying melodic figures and formulae from which a chant melody is built, and how these constituent melodic units were understood by singers at a stage before their transformation into rhythmically measured polyphonic tenors.

An awareness of a chant’s underlying structure – its division into smaller melodic units – thus constitutes another thread through this study of clausula tenors. Perhaps most obviously, an understanding of the internal patterns and formulae inherent in a particular chant melody presents a myriad of new analytical questions – to be addressed in detail below – concerning the treatment of a chant by singers in a polyphonic context. Might singers, for example, attempt to reflect internal structures of chant melodies in rhythmic measure, or are such structures simply set aside in clausula tenor design? What techniques were available to singers for drawing out properties of chant melodies in discant – and what of the potential for chant variation and adaptation? Simply put, what kind of relationship might one expect to find between chant practices and clausula tenors? In addition, and on a more foundational level, it is hoped that an understanding of the internal melodic structures of a chant will serve to more closely align aspects of chant scholarship with the study of tenor melodies of organum and clausula repertories, particularly with regard to the use (and reuse) of common melodic behaviours traceable across the chant melodies of the magnus liber. As one might expect, the reuse of small melodic units or formulae across chant settings in this repertory is hardly surprising; these building blocks of melodies, after all, are to be viewed as essential elements of the musical vocabulary of chant. However, it would seem that this basic aspect of chant composition has yet to be fully appreciated by existing studies of the clausula,


especially for what it may reveal about the compositional processes underlying this repertory. But a recognition of precisely what the underlying melodic units of chant were for singers has particular significance for the study of clausulae, I come to argue, since it foregrounds an important premise for tenor composition: that ways of singing these melodies would have been deeply ingrained in the memories of singers and these sound memories must have surely formed a starting point for the composition of a clausula tenor.

**Sources for the Mass**

The list of chant manuscripts drawn upon in this study builds upon the work of Michel Huglo and Edward Rosener in the Éditions de L’Oiseau-Lyre volumes of the *Magnus liber organi*, which set out to provide a selected list of and commentary on thirteenth-century chant sources primarily for Parisian use, to accompany organum and clausula transcriptions from the manuscripts $W_1$, $F$, and $W_2$. In order to gain a more representative vista of plainchant traditions in this Parisian context, several additional chant books that do not feature in the *Magnus liber organi* editions are also considered here: notably, these include manuscripts from the Augustinian houses of Ste Geneviève and St Victor, from the Benedictine monasteries of St Denis and St-Maur-des-Fossés, as well as several further chant books apparently of Parisian usage. It should be stated from the outset, however, that this study does not attempt to offer a complete survey of Parisian chant manuscripts, nor does it seek to present new conclusions about these sources of chant. Rather, my goal is to gain an understanding of the spectrum of monophonic traditions of chant performance familiar in twelfth- and thirteenth-century Paris as a means to better analyse the use of these materials in a polyphonic context. A list of chant books for the Mass consulted for this study are outlined in Table 2.1.

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48 Two lists of chant sources dating from this period that have assisted with the compilation of this body of manuscripts are: Huglo, ‘Notated Performance Practices’, and Rebecca Baltzer ‘The Sources and the Sanctorale’, in Benjamin Brand, ed., *Music and Culture in the Middle Ages and Beyond* (Cambridge, 2016), 89–108. I am indebted to the generous help of Prof. Andreas Haug and the Bruno Stäblein Archiv in Würzburg in sourcing images of some of these manuscripts.
The fourteen manuscripts listed in Table 2.1 are presented in approximate chronological order. Of these chant books, I take as my principal source the missal BnF Lat. 1112 – a source chosen because it survives as the earliest manuscript witness for the Mass associated with the liturgy of Notre-Dame. Information on the provenance and date for each of the manuscripts is provided from several sources: in most instances studies in *Le graduel romain* and Victor Leroquais’ *Les sacramentaires et les missels manuscrits des bibliothèques publiques de France* constitute the starting point for this research, but more recent studies have been consulted where available. With regard to the codicological situation presented by sources, as the table makes clear, the majority of chant books that represent a Parisian chant tradition (six of the seven manuscript sources) are missals; indeed, only two Graduals of Paris survive from this period with only one, BnF Lat. 1337, probably copied in the

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**Table 2.1**  Chant manuscripts for the Mass from twelfth- and thirteenth-century Paris consulted in this study listed in approximate order of date

<table>
<thead>
<tr>
<th>MS siglum</th>
<th>Type</th>
<th>Date</th>
<th>Provenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>BnF Lat. 13254</td>
<td>Gradual</td>
<td>Second half 12th century</td>
<td>St-Maur-de-Fossés</td>
</tr>
<tr>
<td>BnF Lat. 13253</td>
<td>Gradual</td>
<td>13th century</td>
<td>St-Maur-de-Fossés</td>
</tr>
<tr>
<td>BnF Lat. 1112</td>
<td>Missal</td>
<td>1220s</td>
<td>Paris</td>
</tr>
<tr>
<td>Paris, Ste Geneviève 1259</td>
<td>Missal</td>
<td>Early first half, 13th century</td>
<td>Ste Geneviève</td>
</tr>
<tr>
<td>BnF Lat. 14452</td>
<td>Gradual</td>
<td>Second quarter, 13th century</td>
<td>St Victor</td>
</tr>
<tr>
<td>BnF Lat. 15616</td>
<td>Missal</td>
<td>Late 1240s</td>
<td>Paris (Evreux)</td>
</tr>
<tr>
<td>BnF Lat. 15615</td>
<td>Missal</td>
<td>1250s</td>
<td>Paris (Sorbonne)</td>
</tr>
<tr>
<td>BnF Lat. 1107</td>
<td>Missal</td>
<td>After 1254</td>
<td>St Denis</td>
</tr>
<tr>
<td>BnF Lat. 9441</td>
<td>Missal</td>
<td>Mid/late 1250s</td>
<td>Paris</td>
</tr>
<tr>
<td>Bari, San Nicola 5 (85)</td>
<td>Gradual</td>
<td>1255–1260s</td>
<td>Ste Chapelle</td>
</tr>
<tr>
<td>BnF Lat. 830</td>
<td>Missal</td>
<td>1270s</td>
<td>Paris (St-Germain)</td>
</tr>
<tr>
<td>Paris, Arsenal 197</td>
<td>Gradual</td>
<td>Between 1270–1297</td>
<td>St Victor</td>
</tr>
<tr>
<td>BnF Lat. 8885</td>
<td>Missal</td>
<td>1290s</td>
<td>Paris</td>
</tr>
<tr>
<td>BnF Lat. 1337</td>
<td>Gradual</td>
<td>c. 1300</td>
<td>Paris</td>
</tr>
</tbody>
</table>

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thirteenth century.\textsuperscript{50} By comparison, the contemporaneous chant books originating from other liturgical centres are more diverse in codicological form, date, and notation, indicative of the range of different institutional approaches and styles associated with documenting these melodies.\textsuperscript{51}

**Sources for the Office**

As compared to chants for the Mass, the behaviours of Office melodies as notated within surviving Parisian manuscript sources appear to be far more variable, far less melodically fixed – consequently, a study of the melodic forms of these chants comes with its own set of issues that deserve careful consideration on their own terms.\textsuperscript{52} Further, it is to be noted that there are simply fewer extant sources for the Office from this period than the Mass, making a comparative survey of chant practices somewhat more challenging. As a result, the emphasis of the present study is orientated more towards Mass chants than those for the Office. Office melodies are considered at several points within this thesis however;\textsuperscript{53} at these moments, a similar spread of Parisian chant manuscripts has been consulted (eight in total), listed in Table 2.2.\textsuperscript{54} Just as with sources for the Mass, my comparison of Parisian chant books for the Office has sought to capture something of the range of chant traditions practised in this Parisian context, while at the same time placing special emphasis on those ways of singing chant promoted at the Cathedral of Notre-Dame. Reflecting this focus, the principal source used for Office melodies in what follows is the manuscript BnF Lat. 15181-82 – a noted breviary dating from c. 1300 of Parisian usage.

\textsuperscript{50} The other is Paris, Arsenal 110. For more on these books, see the plainchant editions and commentaries by Michel Huglo in *Le magnus liber organi de Notre-Dame de Paris I*, lxxx.

\textsuperscript{51} For more on notational differences between chant manuscripts of this period, see Huglo, ‘Notated Performance Practices’.

\textsuperscript{52} One study that begins the task of assessing the relationship between chant sources for the Office and Parisian *organa* can be found in Roth Burnette, ‘Organizing Scripture’, chapter 2.

\textsuperscript{53} See, for example, an analysis of the *TANQUAM* melisma from the responsory *Descendit de celis* in chapter 3.

\textsuperscript{54} This list once more builds on the work of Michel Huglo in *Le magnus liber organi de Notre-Dame de Paris I*, lxxx–lxxxi, as well as Huglo, ‘Notated Performance Practices’, and Baltzer, ‘The Sources and the Sanctorale’.
Table 2.2  Chant manuscripts for the Office from twelfth- and thirteenth-century Paris consulted in this study listed in approximate order of date

<table>
<thead>
<tr>
<th>MS siglum</th>
<th>Type</th>
<th>Date</th>
<th>Provenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>BnF Lat. 17296</td>
<td>Antiphoner</td>
<td>Second half, 12th century</td>
<td>St Denis</td>
</tr>
<tr>
<td>BnF Lat. 12044</td>
<td>Antiphoner</td>
<td>12th century</td>
<td>St-Maur-des-Fossés</td>
</tr>
<tr>
<td>Paris, Bib. de l’Univ. 1220</td>
<td>Breviary</td>
<td>1230s</td>
<td>Paris</td>
</tr>
<tr>
<td>Charleville 86</td>
<td>Breviary</td>
<td>Late 1230s</td>
<td>Paris</td>
</tr>
<tr>
<td>Paris, Ste Geneviève 2618</td>
<td>Breviary</td>
<td>1260s</td>
<td>Ste Geneviève</td>
</tr>
<tr>
<td>BnF Lat. 748</td>
<td>Breviary</td>
<td>13th century</td>
<td>Paris</td>
</tr>
<tr>
<td>BnF Lat. 15181-82</td>
<td>Breviary</td>
<td>c. 1300</td>
<td>Paris</td>
</tr>
<tr>
<td>BnF Lat. 14811</td>
<td>Breviary</td>
<td>14th century</td>
<td>St Victor</td>
</tr>
</tbody>
</table>
3. **Organising Chant: Chant Melisma to Tenor Ordines**

The first way I shall investigate the compositional processes by which singers fashioned chant melodies into clausula tenors is to consider how successive notes of a melisma came to be portioned up into particular phrase units within a setting, and to question why such organisational strategies were chosen. More precisely, I wish to examine the organisational design of clausula tenors – the way in which melismas have been arranged into melodic units, or ordines – by comparing them to chant sources associated with twelfth- and thirteenth-century Paris. The underlying premise guiding this approach is that singers who came to create polyphonic clausula settings were intimately familiar with the pre-existent liturgical melodies with which they were working. Knowledge of a chant’s melodic profile and contour, its structure, and its internal melodic divisions – simply, how the chant goes – must have necessarily been the *sine qua non* of polyphonic composition.\(^{55}\) As yet, however, studies concerned with the compositional process underlying clausula design have generally omitted consideration of the relation between monophonic practices of chant and the formulation of clausula tenors. Seeking to address this gap in scholarship, I therefore present an analysis of the relationship between liturgical melodies (and their notation) as documented in contemporaneous Parisian chant books and the ways such melodies were rendered into rhythmic measure. The central proposal that will arise from this work is that certain polyphonic tenors reveal a remarkably close connection to practices of singing chant.

‘*Unpatterned*’ Tenor Designs

First, it is to be established that the pre-existent chants used as the musical foundations of clausula composition were not simply neutral series of pitches ready to be rendered into rhythmic measure: they were themselves organised, structured melodies, already well known to singers in their uses as proper chants of the Mass and Office. Built up from the arrangement of pitches into melodic groupings, and the formulation of more extended figures born out of those groupings, the vocabulary of these chants is based upon successions of melodic gestures that link together the notes of the chant into groups. Such melodic ‘units of

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\(^{55}\) On the requirement for singers at Notre-Dame to learn and perform chant from memory, see, for instance, Wright, *Music and Ceremony*, 326.
sense’ can be seen as essential constitutive elements of a chant that serve in different ways to ‘read’ its text, and thus shape its meaning, as Susan Rankin has noted. Just as in prose, where articulations and punctuations divided up a text into constituent parts, so too in chant. As the eleventh-century theorist Johannes observes: ‘in prose, where one makes a pause in reading aloud, this is a colon; when the sentence is divided by an appropriate punctuation mark, it is called a comma; when the sentence is brought to an end, it is a period… Likewise, when a chant makes a pause by dwelling on the fourth or fifth note above the final, there is a colon; when in mid-course it returns to the final, there is a comma; when it arrives at the final at the end, there is a period.’ Put a different way, melodic groupings inherent to a chant become articulated in their marking out of particular semantic units and cadential moments. This marking out of smaller segments of a chant, moreover, would have held special mnemonic value for medieval singers, since, as Mary Carruthers has suggested, to remember something sententialiter [by the sense-units] ‘would mean to remember it in chunks… by its constituent ideas or sententiae.’ For medieval singers, a conceptualisation of chant melodies in this way can be seen to facilitate the process of memorisation, since to divide the material into passages short enough to be recalled in single units and to key these into some sort of rigid, easily reconstructable order, is a ‘fundamental principle’ of medieval practices of memoria. Furthermore, and crucially for this discussion, such divisions of the melody might be regarded as the basis for thinking about this chant material – a conception that shaped ways of singing the melody and thus, also, ways of writing it down.

The chants set as polyphonic tenors of clausulae, then, had their own melodic profile formed from groups of notes, melodic figures and patterns well before they came to be

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58 Mary Carruthers, The Book of Memory: A Study of Memory in Medieval Culture, 2nd ed. (Cambridge, 2008), 115. This description largely follows a definition of sententia by Isidore of Seville (discussed by Carruthers in the chapter ‘Elementary memory design’). For more on this in a musical context see Leo Treitler, ‘Medieval Improvisation’ in With Voice and Pen, 1–38, at 30.

59 Carruthers, The Book of Memory, 8.

60 One example of precisely this point, often found in thirteenth-century Dominican books of chant, is the use of stroke marks to divide up chant melodies into smaller units. On this, see Eleanor Giraud, ‘The Production and Notation of Dominican Manuscripts in Thirteenth-Century Paris’ (Ph.D. diss., University of Cambridge, 2013); and also Michel Huglo, ‘Dominican and Franciscan Books: Similarities and Differences between their Notations’, in John Haines, ed., The Calligraphy of Medieval Music, Musicalia Medii Aevi 1 (Turnhout, 2011), 195–202.
organised into particular tenor arrangements – a profile that was not only familiar to medieval singers, but constituted a foundational part of how that melody was learnt and committed to memory. When thinking about ways in which monophonic traditions of chant might have influenced the polyphonic design of a piece, therefore, it is not just the given pitches of that chant, but significantly, its structural characteristics and the grouping of pitches within the melody that predicates its rendering into rhythmic measure. It is also to be acknowledged, however, that as these groupings of pitches came to be set in discant, they were absorbed into a system that rendered them as discrete, measurable, proportional units of time. The formulation of a chant into rhythmic measure – into *musica mensurabilis* – can be seen as a conceptually different interpretation of that melody from those ways of singing common to monophonic chant practices. And this shift offered musicians a new set of compositional parameters to explore in polyphony; new ways of imagining a chant melisma that can be seen as qualitatively distinct from monophonic practice. The central issue to be addressed here concerns the means by which musicians mediated between these two different ways of performing chant. Are monophonic and discant polyphonic practices to be viewed as fundamentally different, or in some way alike?

In answering this question, my focus will be directed towards one of the most prolific rhythmic arrangements to be found across the *clausula* repertory: those settings whose tenors have been arranged into phrases of varying length (as opposed to those set in a recurring rhythmic pattern). This is because, as well as being the commonest type of tenor design, these ‘unpatterned’ lower voices, typically comprised of longs, double longs, or some mixture of the two, can be seen to handle their melodic material in a far less systematic, far more flexible way than tenors based on a recurring rhythmic design. Despite their regular appearance throughout manuscript collections, however, these settings have drawn little scholarly attention to date. One reason for this apparent paucity, I would argue, is because of a perceived ‘perfunctory quality’ of this specific type of tenor design. Positioned at the earliest end of a model for *clausula* development that argues for increasing order and

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61 On this process, see Treitler, ‘Regarding Meter and Rhythm in the “Ars Antiqua”’, *The Musical Quarterly* 65 (1979), 524–558, especially at 544-5.

62 Across *F, W₁*, and *W₂*, this type of rhythmic arrangement appears in more than 650 *clausulae*, the greatest proportion of which can be found within *organum* settings, though they are by no means uncommon in separate *clausula* collections: the first ordered series of 202 *clausulae* in *F*, for example, contains 76 settings arranged in this way, and nearly all of the *clausulae* within the fourth and fifth ordered series are similarly organised. For more on this rhythmic behaviour, see Baltzer, ‘Notation, Rhythm, and Style’, in particular, chapters 6 and 7.

63 Baltzer, ‘Notation, Rhythm, and Style’, 356.
sophistication in clausula composition, tenors that organise their chant materials into unpatterned arrangements have often been regarded as a more functional progenitor of the more compositionally elaborate strands of the clausula repertory. In this regard, their seemingly ‘random’, ‘asymmetrical structures’ are often viewed as the basis from which more ‘systematic’ formulations of chant materials in modal patterns developed—a view of compositional development that, in turn, has been linked to proposed chronological layers of the repertory. Arising from this, emphasis to date has generally been placed upon investigating clausulae whose tenor designs can be considered remarkable and of more immediately discernible compositional interest.

Perhaps in consequence, the arrangement of chant material into unpatterned clausula tenors has hitherto been perceived as somewhat haphazard or arbitrary. For little evidence has been found to suggest a consistent working method for organising the underlying chant material beyond a certain degree of co-ordination with the duplum voice. Rather, discussions have tended to emphasise the pragmatic motivations of singers in order to account for the way a melisma is fashioned into this rhythmic design. William Waite, for example, has argued that such breaks in the tenor voice ‘merely correspond with rests in the duplum or are introduced to allow the singers to take a breath’. In other words, rather than detecting any clear compositional motivations for divisions in tenor arrangements within clausulae settings, practical concerns—such as a desire for ‘Atemtechnik günstigen Gruppenbildung’ [phrase construction favourable for breathing], as Rudolf Flotzinger proposes, or a consideration of the length of the melisma and any syllable changes it may contain—have been regarded as guiding principles for the organisation of plainsong into these polyphonic tenors.

But characterised, as they are, by variable phrase structures and less bound by the organisational frameworks imposed by recurring rhythmic patterns, clausulae using unpatterned tenor configurations make especially inviting specimens through which to explore possible connections to chant traditions precisely because of their flexibility in design. In what is to follow, therefore, I come to examine the organisational schemes of unpatterned clausula tenors from a new analytical perspective that takes as its starting point an understanding of the ways chant melodies were known and conceived of by singers in a

64 Flotzinger, Der Discantussatz, 141.
65 See, for instance, Baltzer, Le magnus liber organi de Notre-Dame de Paris V, xlii.
66 Waite, The Rhythm of Twelfth-Century Polyphony, 47.
67 Flotzinger, Der Discantussatz, 141.
monophonic context. By first calling upon two clausula examples, then moving to a repertory-wide consideration of settings, I seek to compare the underlying melodic structures identifiable within monophonic witnesses of chant to the organisational principles discernible in unpatterned clausula tenors – an approach, I suggest, that may throw new light on the compositional process of formulating such polyphonic settings.

TWO CASE STUDIES

I. [DOMI]NE

A starting point for this analysis is a clausula on a portion of the fifth-mode Gradual for St. Stephen, Sederunt principes (M3) – on the melisma [DOMI]NE. It is preserved within the fifth fascicle of F (fol. 151v VI), as well as within organum settings in W1 (fol. 27r) and W2 (fol. 65v). Set in successions of longs, the clausula (transcribed in Example 2.1) neatly exemplifies the kind of variable phrase structure scholars have come to expect of such tenor arrangements. Indeed, while the opening of the setting gives the impression that the chant has been organised into a recurring rhythmic pattern – the first five phrases are fixed around a four-note pattern – this structure breaks down in the second half of the setting where the rhythmic arrangement of the tenor is considerably more irregular. In this second portion of the tenor, notes of the chant are grouped into phrases ranging from two to five notes; the portioning up of chant material here appears much more flexible, with no clear pattern determining the arrangement of the melisma. The question to be posed, therefore, is: how might one account for this tenor design? What of the compositional processes underlying this unpatterned phrase structure?
Such a question, I propose, is best answered through a consideration of Parisian chant books containing this melody, since this will not only provide information about basic conceptions of the melisma common to chant practice, it will also draw attention to how such conceptions have been taken up or altered within a polyphonic context. To now turn to such books, it would appear that the musical foundation of this *clausula* was transmitted with an overwhelming consistency. In fact, a comparison of the fourteen Parisian chant sources presented in Example 2.2 reveals that the given pitches of the melody are subject to only minor differences in detail. Just the beginning, as well as one instance at the end of the melisma, contains sites of melodic divergence, indicated at A, B, and C in the example. Here, versions preserve a different number of repeated notes in the chant – a form of variant Michel Huglo has simply attributed to ‘the wear and tear of time’. 68 Specifically, at A, there is a fairly even split between those sources containing two repeated cs (five witnesses), and those with three (eight witnesses); just BnF Lat. 13253 contains one c. At B, somewhat in contrast, the majority of versions contain just one c – only three contain an additional note. Finally, the variant at C, only preserved in the Paris, Arsenal 197 witness, presents a single f where all other manuscripts notate two pitches. Aside from these minor differences, however, it would

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Example 2.2
Comparison of the DOMINE melisma in 12th- and 13th-century Parisian chant books

A

B

X

Y
appear from written witnesses that this melisma travelled across Paris with an evident durability: every manuscript preserves a near identical transmission of the melody.69

This degree of melodic stability, I suggest, can also be understood on a much broader level, for it is to be noted that this was a melisma sung in more than just this gradual chant. In fact, it seems that this was a portion of melody that would have been very familiar indeed to chant singers. Something of a stock melodic gesture (one of the many tabulated in Willi Apel’s *Gregorian Chant*), it was a passage of chant that appears in at least two further fifth-mode graduals within a Parisian liturgy: the chants *Protector noster* and *Benedictus qui venit*.70 A level of consistency in the singing of this melisma can thus be seen to extend well beyond the transmission of an individual chant. This mosaic-like formula – a structural fundament of the chant melody – was clearly well known to singers and evidently underpinned the manner in which this melisma was remembered and shared.

The level of melodic consistency found in the [DOMI]NE melisma extends to its notation across chant sources (and across appearances of the melisma in different chants) as well. That is to say, it is not only the given pitches of the melody that remain largely stable between chant books, but the ways in which those pitches were conceived of in relation to one another – the grouping of pitches in this regard can be seen to be reflected in the notational figures used by those who wrote them down.71 And this notational stability is observable throughout the melisma. Most prominently, from the point in the example marked at X, all versions can be seen to concur in their arrangement of notes into melodic units. In fact, the seventeen pitches outlined by X are notated uniformly across witnesses: an initial four-note figure formed of a rising step followed by a descending three-note gesture is repeated three times in a similar fashion. Following this, the melodic figure outlining a-f-a-g-f is consistently copied as a five-note unit, most typically as a two-note ligature followed by a three-note ligature. And in a similar vein, the final portion of the melisma (at Y), moving to the highest pitch of the melody, is handled with notable stability across almost every manuscript, so that the melisma’s final eight pitches are copied as streams of two-note

69 Such an observation resonates closely with Jennifer Roth Burnette’s analysis of a collection of Office melodies in which she similarly detects only a ‘small degree of variation from source to source, and the content of variations where they do occur’. See Roth Burnette, ‘Organizing Scripture’, 36.

70 See formula C_{10} in Willi Apel, *Gregorian Chant*, 347.

71 On this foundational purpose of music notation, as the representation of musical practice through written signs, see Susan Rankin, *Writing Sounds in Carolingian Europe: The Invention of Musical Notation* (Cambridge, 2018), in particular, the section ‘Writing Music’.
ligatures. This notational uniformity, especially in light of the melodic consistency across witnesses of the [DOMI]NE melisma, strongly implies a consensus in the underlying conception of the melody among Parisian chant practices.

**Example 2.3** Comparison of divisions within the [DOMI]NE tenor and Parisian chant books

A comparison of the notation of the [DOMI]NE melisma within surviving chant books – or, more precisely, a comparison of melodic groupings reflected in the notation – and the rhythmic organisation of the clausula tenor shown in Example 2.3 is now particularly revealing. The top line of the example presents the [DOMI]NE tenor with phrase divisions illustrated by brackets above notes, while below is the most common form of the chant melody compiled from all fourteen chant sources. As shown in the comparison, the clausula does not begin from the start of the melisma but two notes in, after the two-note ligature moving from d-c.⁷² And in its first two phrases, the setting does not seem to have a particular similarity to the grouping of pitches within chant sources – only the version of the melisma in BnF Lat. 1112 (see Example 2.2) appears to reflect a similar conception of the chant reflected in the division of melodic figures. But from the passage marked X – the moment where all monophonic witnesses employ the same notational figures – one finds a striking concordance in the way the clausula tenor portions up the melisma. Here it seems that the tenor organises the melisma in precisely the way that pitches are grouped within chant books: the three phrases containing four pitches repeated in near sequence are preserved exactly in the arrangement of the clausula. If the performance of chant is taken as the starting point for its

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⁷² For more on the manipulation of chant, including the decision to vary the point in the melisma at which a clausula begins, see below at 90–111, and 118–123.
notation in chant books, then the way of singing the chant – its musical sound – at this point in the melisma is replicated exactly in its organisation as a *clausula* tenor.

Following this moment, the *clausula* departs from the four-note rhythmic design that had defined the phrase structure of the tenor thus far. This is a change, I argue, that is best explained by a consideration of the divisions of the melody reflected in the notation of chant books. At this point in monophonic sources, the melody that follows the repeated four-note figure is notated as a unit of five notes – a two-note ligature, followed by a three-note ligature – so that, from X, chant sources can be seen to arrange the melisma into groups of 4+4+4+5. Significantly, this way of singing the chant is reflected precisely in the *clausula* tenor’s design: the organisational principle guiding the structure of the [DOMI]NE tenor here is identical to the arrangement of notes across chant books. And following on from this, the close of the tenor also seems to bear a notable resemblance to monophonic witnesses of the chant. Returning once more to groupings of four-note units, the *clausula* can be seen to reflect the arrangement of pitches in chant sources which typically group notes into two-note ligatures.

Examination of one particular Parisian chant book, presented in Example 2.4, makes this similarity plain. For the notation of manuscript BnF Lat. 1337 – a Gradual of Parisian use – not only articulates the groupings of melodic figures through orthographical proximity and the manner in which pitches are ligated; it also physically distinguishes these melodic units, separating them with a stroke mark made in dry point by the scribe. Stated directly, the divisions within the melisma noted in this book reflect a pronounced connection between chant and polyphonic tenor. From the point in the melisma at which all monophonic witnesses concur (beginning on the bottom line of Example 2.4), the marking out of stroke lines, highlighted in red, corresponds to the ways of grouping pitches in the [DOMI]NE *clausula*. The internal melodic units of the melisma that have been demarcated in this manuscript represent a conception of the chant – based on a fundamental awareness of how this melody is to be sung – which is not only shared across chant books, but significantly, also underpins the rhythmic organisation of the *clausula* tenor.73

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To be sure, my aim here is not an attempt to link chant books or institutional practices of singing chant to particular polyphonic tenors. Neither is it to posit an intractable link between written manifestations of chant melodies and ways in which creators of clausulae organised their tenors. Rather, it is to see what kinds of relationship may lie between groupings of melodic figures reflected in chant sources and the motivations for arranging clausula tenors into particular rhythmic designs. And specifically in this clausula it would appear that an affinity to groupings of pitches in this melisma has been reflected in the phrase divisions of the tenor. This, I suggest, is no coincidence. The periodic arrangement of the clausula tenor seems to bear too close a resemblance to monophonic traditions of singing chant to be explained away as an arbitrary design, most especially at the moment where three four-note groupings are followed by a five-note unit in both the chant and the tenor. But equally, the relationship between these two ways of singing chant need not be exactly analogous. In the making of the clausula, a number of other compositional motivations, not least the co-ordination between two voice parts, must also have come to bear on exactly how a singer was to arrange their chant material; such considerations may serve as one explanation of those moments where tenor organisation does not correspond to chant groupings. My point, however, is that a number of elements drawn from traditions of singing the chant in a monophonic context (and by extension, the basis for the notation of the chant melisma) appear traceable within this clausula tenor. It would seem that practices of performing this chant melisma did not only provide the melodic foundation of the polyphonic clausula, but they also influenced the arrangement of the melisma into tenor ordines.

Example 2.4 The melisma [DOMI]NE from Sederunt principes, Lat. 1337, fol. 223r
II. ILLI

The [DOMIN]e clausula, I want to suggest, is a conspicuous, though not uncharacteristic example of the possible underlying connections between chant melodies and polyphonic tenors. A further clausula, on the melisma ILLI, from another fifth-mode gradual, this time for the Mass of a bishop confessor, *Ecce sacerdos magnus* (M50), exhibits a similar organisational reciprocity between monophonic and polyphonic practices of chant performance, suggesting that this strategy for tenor design may well have had wider use by singers as a compositional resource for structuring a clausula. Like the [DOMIN]e melisma, this segment of chant is preserved with notable consistency across chant books, as shown in Example 2.5. And similar to the [DOMIN]e melisma, the ILLI melisma is a melodic formula with particularly wide usage across the chant repertory, appearing in no fewer than seven other fifth-mode graduals.\(^\text{74}\) Melodically speaking, only one variant can be identified across Parisian chant sources of this specific melisma, shown at \(X\), where the first three notes on the syllable ‘-LI’ are preserved a tone higher than all other witnesses. Aside from this moment, however, all twelve manuscripts record exactly the same melody at this point in the chant.\(^\text{75}\)

Notationally, too, the melisma is characterised by an evident uniformity in the way notes have been grouped in ligature. Only two sites of difference can be identified: the first, at \(Y\), simply records two contrasting approaches of notating the melodic alteration around \(c\) and \(d\) in the melody: some notate this moment as a three-note ligature followed by a two-note ligature (seven witnesses), while others record a single, five-note ligature (three witnesses). The second, shown at \(Z\), preserves two different ways of notating another melodic grouping: most manuscripts make use of a two-note ligature followed by a four-note ligature, though three notate a series of three-note ligatures. Thus, while it appears that slight differences distinguish some of the versions of this chant, overall, this is a melody marked by a consistency in its given pitches and notation; it was evidently a melisma that was especially memorable to chant singers.

\(^{74}\) See formula A\(_{11}\) in Apel, *Gregorian Chant*, 348. These chants are: *Christus factus*; *Exiit sermo*; *Propitius esto*; *Locus iste*; *Bonum est confiteri*; *Vindica Domine*; and *In Deo speravit*.

\(^{75}\) I have not found this melody to be fully notated in BnF Lat. 13253 or 13254.
Example 2.5 Comparison of the ILLI melisma in 12th- and 13th-century Parisian chant books
If one takes the chant books presented in the example as reflecting orthographically ways of singing the melisma – providing detail about what the smaller constitutive elements were, and how these elements came to be grouped together – a great deal of information concerning the organisation of the melody may be inferred from these material witnesses. The missal BnF Lat. 1112 may be taken as a case in point, for the melodic units of the ILLI melisma represented notationally in the grouping of ligatures are especially clear to identify here (Example 2.6). From the two two-note ligatures over the beginning of the syllable ‘-Ll’, the melisma typically moves between groupings of two or three notes. The first part of the melisma can be seen to alternate in its combination of melodic units, initially, as a series of two-note groupings, with one or two longer figures; the second part of the melisma, however, is much more orientated around three-note units, particularly those outlining a scalar or triadic descent.

**Example 2.6**  ILLI melisma, BnF Lat. 1112 fol. 213r

Taking this formulation of the chant melisma as an indication of possible monophonic conceptions of the melody, what now can be said of the way singers handled the melisma as a clausula tenor? One telling example, I suggest, can be found in the fourth fascicle of F, in the first cursus of a setting of the ILLI melisma preserved in an organum on fol. 139v I (see Example 2.7a).76 This is a clausula whose tenor is rendered as a series of longs, portioned up

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76 Interestingly, the second cursus of this clausula arranges notes of the chant into a repetitive five-note rhythmic pattern (formed of a double long–long unit followed by three longs). The complete setting thus provides two contrasting ways of hearing the chant: one with a pronounced connection to chant singing, the other more compositionally abstract.
into phrases of variable length, and whose upper voice reflects this same periodic design, consistently aligning the ends of phrases with breaks in the chant melisma. Significantly, the organisational model underpinning this tenor design bears striking resemblance to the grouping of notes found within chant books. Example 2.7b presents a comparison of the tenor to the chant melisma preserved in BnF Lat. 1112. As the example illustrates, the melodic units of the chant melisma coincide with the breaks of the clausula tenor in almost every case. The first ordo of the clausula, for example, neatly coincides with the two two-note ligatures on the syllable ‘-LI’ of the chant; following this, the tenor’s five-note unit corresponds to a grouping of a three-note ligature followed by a two-note ligature, and the two groupings of four notes in the tenor after this parallel the divisions of the chant into analogous units. The end of the clausula adds further weight to this argument: at this passage (x in both examples), the chant melisma has been portioned into three-note units, each outlining a stepwise descending movement. This precise arrangement of notes is reciprocated in the clausula’s tenor design, where the melisma is divided up into a six-note ordo followed by a three-note ordo.

Example 2.7a  ILLI F fol. 139r (first tenor cursus)
Only one moment in the ILLI clausula’s tenor design can be seen to depart explicitly from the grouping of notes reflected in the chant manuscript (highlighted in Example 2.7b): here, while the chant melody is arranged into ligature groupings of 3+2+3, the tenor divides up the melisma into two phrases of four-notes. But this, I suggest, is an instance where the dynamic relationship between monophonic heritage and polyphonic composition is especially pronounced – where compositional decisions less concerned with reflecting the structure of the chant, and more interested in a particular polyphonic design appear to shape the organisation of the tenor. For it is at this moment that the clausula’s design is at its most consistent and repetitive of the whole setting: from the point marked y in Example 2.7a, both tenor and duplum are organised into a series of four-note phrases. One result of this arrangement, it seems, is the foregrounding of melodic and rhythmic similarities across ordines. A paired relationship between tenor phrases, for instance, appears to be established where phrases numbered 1 and 2 in the example each come to a close on a d, while phrases 3 and 4 move a step down, ending on cs. This periodic consistency is further articulated by a rhythmic design that recurs at the end of each phrase, marked at z in the example. Here, phrases 1–4 all finish with a series of five breves which, by the fourth hearing, becomes an established rhythmic pattern defining these four-note units. In other words, one rationale for the divergence from chant groupings in the tenor seems to be rooted in a desire to draw out certain repetitive features of both tenor and duplum voices.

I want to suggest, therefore, that whoever created this clausula did so with an underlying awareness of the structural properties of the chant, and that his rhythmic design,
far from an arbitrary infusion of rhythmic measure into an otherwise neutral series of notes, was in fact a pattern chosen precisely because of its relation to monophonic conceptions of the chant melisma. An explanation for the arrangement of the chant melisma into its particular rhythmically measured design in this setting must therefore lie in a way of thinking about this material that has its origins in chant traditions, and that the underlying conception of this very well-known melody in turn influenced the way in which it was handled within a polyphonic context. But this design is mediated somewhat by other compositional concerns born out of the chant’s new polyphonic situation which results in differences in the melodic groupings of the melisma at certain points. In toto, however, the palpable connections between the two practices suggest a much closer relationship between monophonic and polyphonic conceptions of chant than has been appreciated in scholarship to date: it would seem that properties of a chant melisma quite beyond its melodic content – its structure and its melodic profile, for example – also impacted on how musicians set it in measured rhythm.

**Repertorial Traces and Patterns of Transmission**

A relationship between the melodic groupings of chants and unpatterned clausula tenors can be traced even more widely across the repertory. Indeed, evidence of a discernible connection between the two can be identified in multiple different settings, both in organa and separate clausulae, across all three of the main manuscript sources of the magnus liber. Remarkably, in these settings, it would appear that the small, mosaic-like units of melody that underpin a chant’s internal structure came to influence the organisational design of clausula tenors in a very active way. This means that the melodic groupings of chant melismas that constituted an essential part of a singer’s musical vocabulary were now being drawn upon directly as the basis for the rendering of a chant melody in rhythmic measure – a compositional principle explicitly guided by an awareness of the chant and its monophonic heritage.

To this end, Table 2.3 presents a list of settings based on Mass chants within magnus liber sources that appear to exhibit a pronounced connection between the internal melodic units of chant melodies and their organisation as unpatterned clausula tenors. Ordered according to their numbering within Ludwig’s catalogue, the table sets out both the text of

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77 The reason for my focus on Mass chants, beyond an issue of scope, is related to the transmission of Office melodies in twelfth- and thirteenth-century Paris. On this, see above at 59–60.
the melisma and the chant from which that melisma is drawn. Alongside these details are the folio numbers of those chants as they appear in the Parisian missal BnF Lat. 1112. The table, however, is not intended as an exhaustive list: a number of shorter, more syllabic settings (many of which simply do not include breaks in the tenor), as well as those whose tenors are set according a recurring pattern have been set aside here. Its purpose, rather, is to persuade of the possibility of a discernible relationship between monophonic and polyphonic practices of performing chant underlying the periodic design of clausula tenors.

### Table 2.3 Unpatterned clausula tenors with similar melodic groupings to chant melodies in BnF Lat. 1112

<table>
<thead>
<tr>
<th>Ludwig No.</th>
<th>Text</th>
<th>Chant</th>
<th>MS + folio no.</th>
<th>Appearance in BnF Lat. 1112</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1</td>
<td>OMNES</td>
<td>Viderunt omnes</td>
<td>F fol. 99°</td>
<td>fol. 20°</td>
</tr>
<tr>
<td>M1</td>
<td>OMNES</td>
<td>Viderunt omnes</td>
<td>F fol. 148° IV; W1 fol. 49° III, 2</td>
<td>fol. 20°</td>
</tr>
<tr>
<td>M1</td>
<td>OMNES</td>
<td>Viderunt omnes</td>
<td>F fol. 148° V, 1</td>
<td>fol. 20°</td>
</tr>
<tr>
<td>M1</td>
<td>OMNES</td>
<td>Viderunt omnes</td>
<td>F fol. 148° V, 2</td>
<td>fol. 20°</td>
</tr>
<tr>
<td>M1</td>
<td>OMNES</td>
<td>Viderunt omnes</td>
<td>F fol. 148° VI; W1 fol. 49° III, 2 (second statement)</td>
<td>fol. 20°</td>
</tr>
<tr>
<td>M1</td>
<td>OMNES</td>
<td>Viderunt omnes</td>
<td>W1 fol. 25°</td>
<td>fol. 20°</td>
</tr>
<tr>
<td>M1</td>
<td>DOMINUS</td>
<td>Viderunt omnes</td>
<td>F fol. 100°</td>
<td>fol. 20°</td>
</tr>
<tr>
<td>M3</td>
<td>[DOMI]NE</td>
<td>Sederunt principes</td>
<td>F fol. 151° VI; W1 fol. 27°; W2 fol. 65°</td>
<td>fol. 155°</td>
</tr>
<tr>
<td>M8</td>
<td>HERODES IRATUS</td>
<td>Laus tua deus</td>
<td>F fol. 180° IV</td>
<td>fol. 156°</td>
</tr>
<tr>
<td>M9</td>
<td>HERUSALEM</td>
<td>Omnes de Saba</td>
<td>F fol. 105°; W2 fol. 68°</td>
<td>fol. 22°</td>
</tr>
<tr>
<td>M10</td>
<td>VIDIMUS</td>
<td>Alleluia</td>
<td>F fol. 180° VI</td>
<td>fol. 22°</td>
</tr>
<tr>
<td>M11</td>
<td>AUDIVIMUS</td>
<td>V. Vidimus stellam</td>
<td>F fol. 172° VI</td>
<td>fol. 163°</td>
</tr>
<tr>
<td>M12</td>
<td>ET CONFITEBOR</td>
<td>Alleluia</td>
<td>F fol. 154° IV; W1 fol. 30°</td>
<td>fol. 152°</td>
</tr>
<tr>
<td>M13</td>
<td>HEC DIES</td>
<td>Hec dies</td>
<td>F fol. 109°; W1 fol. 31°; W2 fol. 71°</td>
<td>fol. 105°</td>
</tr>
<tr>
<td>M13</td>
<td>HEC DIES</td>
<td>Hec dies</td>
<td>F fol. 155° I</td>
<td>fol. 105°</td>
</tr>
<tr>
<td>M13</td>
<td>DOMINO QUONIAM</td>
<td>V. Confitemini dominus</td>
<td>F fol. 156° I; W1 fol. 31°</td>
<td>fol. 105°</td>
</tr>
<tr>
<td>M17</td>
<td>ET TENUERUNT</td>
<td>Alleluia</td>
<td>F fol. 111°</td>
<td>fol. 108°</td>
</tr>
<tr>
<td>M17</td>
<td>ET OCCURRENS</td>
<td>V. Surrerect dominus</td>
<td>F fol. 174° I</td>
<td>fol. 108°</td>
</tr>
<tr>
<td>M18</td>
<td>IAM NON MORITUR</td>
<td>Alleluia</td>
<td>F fol 112°</td>
<td>fol. 109°</td>
</tr>
</tbody>
</table>
First, it is to be noted that the transmission of the forty-one clausulae recorded in Table 2.3 is markedly diverse. A large proportion of the settings listed are preserved within organa – twenty-four in total – though many have concordances in separate clausula fascicles as well. The vast majority are preserved in some form within $F$, the distribution between organa or separate clausula settings here appearing to be fairly even – eighteen are to be found within a larger polyphonic context while twenty-one are preserved in fascicle V (the separate clausula fascicle). Only two unique settings are found elsewhere, in the organa of $W_1$. But many of the clausulae documented within $F$ also have a witness either in $W_1$ (fifteen clausulae) or $W_2$ (six settings). Notwithstanding the fact that $F$ can be seen to record a significant proportion of such settings – perhaps a result of an underlying tendency towards
exhaustive collection within this book – patterns of transmission for these clausulae appear particularly widespread.

The variety of concordances and codicological situations in which these clausulae appear, and the scope of chant materials used, would seem to suggest that this compositional principle for dividing up a melisma was not an isolated practice, but one that received considerable use across the repertory. Also significant is the range of different chant materials handled in this way. While several of the clausulae within Table 2.3 are based on relatively short passages of melisma, others, for instance the setting upon DOMINUS from the Gradual Viderunt omnes (fol. 100r), treat some of the longest, most elaborate melismas of this polyphonic repertory in a manner consistent with the melodic groupings of chant. This suggests that this particular way of rendering a chant in measured rhythm does not seem to be reserved for a specific type of melisma with certain melodic properties but was utilised in a variety of different polyphonic contexts. And plausibly, the multiplicity of polyphonic settings created in this way bears witness to the work of many different musicians, reflecting several different layers of compositional activity rather than just one early compositional layer as previous writers had typically suggested.

Viewed together, this evidence suggests that one compositional strategy for creating a clausula tenor, at least in the context of unpatterned tenor designs, was closely linked to ways of singing chant common to monophonic liturgical practice. The sheer volume of settings within which a relationship between the groupings of chant and the organisation of polyphonic tenors can be discerned suggests that this strategy was one frequently called upon by singers, and crucially, that an intimate knowledge of the structure of the melisma being set in polyphony was a foundational part of a singer’s compositional process. Thus, where commentators have suggested clausulae with unpatterned tenor designs may lack a clear organisational structure, I now want to suggest that singers creating such settings certainly knew and employed ways of organising their material that may have resonated strongly with monophonic characterisations of the same chants – moreover, for them, this was an obvious place to start.

On one hand, the possibilities afforded by rendering chant in rhythmic measure granted singers considerable scope to experiment with monophonic practices in the design of clausulae. In this regard, the organisation of a tenor in a manner sympathetic to the melodic groupings of chant is all the more striking, for in the decision to reflect such an arrangement, the singer has deliberately articulated these melodic units in discant, drawing attention to
them within this polyphonic context. Yet on the other, the foregrounding of this property of chant is to be viewed as just one of a number of compositional considerations impacting upon the design of the setting. Indeed, a desire to achieve a particular duplum design, or to make use of a specific scheme of repetition, for instance, can also exert significant control over how a tenor is to be devised, thereby moderating the influence of chant groupings on the setting’s overall design. The range of compositional factors in operation within a clausula often serves to blur the relationship between plainchant and polyphonic tenor, articulating something of the dynamic relationship between monophonic and polyphonic practices discernible within this repertory. Above all, what seems to link these different compositional considerations is a heightened awareness of the chant itself – of its melodic affordances, and the ways these pre-existent melodies may be rendered in rhythmic measure.

Notably, this apparent affinity between unpatterned tenor arrangements and melodic units of chant might also offer a starting point to hypothesise about how singers set about composing a clausula. These familiar ways of singing chant materials represented in chant books may have served as a preliminary step in which chant melodies were transformed into tenors of clausula settings. That is to say, a creator of a clausula, in setting out to create his piece, may have been first guided by how he knew the chant melisma – that ways of singing chant served as the organisational basis for his new composition. Consequently, and from this point, he may be able to devise more abstract recensions of that melisma, with less in common with practices of singing chant, that serve to augment his fund of compositional strategies for creating a clausula tenor. This newly apparent relationship between chant and polyphonic tenors, then, offers fresh insight into a foundational question of compositional process – of how musicians handled their chant material. The rhythmic designs of clausula tenors presented here, apparently sympathetic to the character of the original chant, serve as a vivid reminder of the ways that musicians interacted with their monophonic musical heritage; a heritage that afforded seemingly limitless possibilities for compositional experimentation.

78 It is perhaps also significant that the melodies discussed here – specifically fifth-mode graduals – were among the best known, most mosaic-like of the solo chants to be set in polyphony: a point that may have encouraged, or at least facilitated their rendering into a clausula tenor in this way.
4. MANIPULATING CHANT

While some tenors appear to exhibit a very close relationship to the liturgical melodies found in contemporaneous Parisian chant sources, other clausulae can be seen to draw upon chant melismas in a much more flexible way. Indeed, a feature of the surviving repertory that calls for further study, having received little attention in current scholarship, is the high degree of melodic variation often found between clausula tenors based on the same chant: variations in individual pitches, in the passage of melisma set, and – most significantly – in the number of notes within a specific melisma. The extent of these variations (or ‘variants’) does not appear to have concordances in any surviving chant manuscript. Moreover, while variation in chant practice between centres might account for some of these differences, the nature and scope of changes in a polyphonic context frequently differ from those found in plainchant sources, suggesting that this degree of variation is not only the result of monophonic practice. In this section, I begin the task of describing and accounting for types of variation found across polyphonic treatments of chant by tracing melodies (and their differences) in Parisian chant sources through to their extensive polyphonic settings within clausula collections. In turn, I will come to suggest that these chant materials have undergone deliberate alteration when set in measured polyphony. Furthermore, the multiplicity of techniques for adaptation of chant melodies within a polyphonic context argues for a diversity of underlying motivations: in what follows, I also attempt to identify some of those motivations.

Example 2.8 presents two different ways of singing the melisma ‘DOMINUS’ from the Gradual Viderunt omnes in polyphony; this chant was sung at the third Mass on Christmas Day and also on its octave in a Parisian rite. The first clausula, in Example 2.8a, is a section of a two-part organum drawn from the fourth fascicle of F. In this setting, the DOMINUS melisma totals fifty-six notes in length and has been divided up into four-note melodic units, organised into a rhythmic pattern of repeating longs. The chant has been arranged accordingly into fourteen equal phrases in the setting – a unique recension of the DOMINUS melisma among polyphonic and monophonic sources. Importantly, this chosen rhythmic organisation affects the way the chant melody is to be heard: by dividing the melody up into groups of four notes – a pattern distinct from the units of melody documented within chant sources – certain pitches of the melisma are given greater or lesser prominence as a result of their position within a phrase. And the overall tenor design gives voice to melodic features within the chant that are newly emphasised as a result of their rhythmically measured
situation: note, for instance, the symmetry created by the shared pitches of the first and last tenor phrases in the *clausula*.

**Example 2.8a**  **DOMINUS, F fol. 100⁶**
Example 2.8b  DOMINUS, F fol. 149° I
The second setting of the melisma, a clausula preserved on fol. 149v I of the same manuscript, and shown in Example 2.8b, presents a somewhat different arrangement of the chant. Here, as with the first example, the tenor acts as the primary agent for musical design within the piece, establishing certain musical attributes (not least, an underlying phrase structure) that come to influence the form of the setting on a number of levels. But this clausula makes use of a chant melisma sixty notes in length, plus two additional pitches that form a purum close to the setting, in contrast to the fifty-six notes of the previous clausula. These sixty pitches are divided up into three-note groups of longs, producing a tenor formed of twenty phrases. As a result, the polyphonic formulation of the chant as compared to the first setting is considerably different.

The two clausulae thus present quite separate ways of handling the DOMINUS melisma; variation in the given pitches of the melisma and different strategies for arranging this melodic material in rhythmic measure have generated two contrasting compositional responses to the same chant. Comparing the two tenors directly, at Example 2.9, six additional notes distinguish the version of the chant used in the second setting from the first: five note repetitions and one new pitch (circled in the example). These types of subtle modifications to the length and given pitches of the chant melody between clausulae, I suggest, play a significant, and hitherto, largely unrecognised role in the polyphonic design of settings based on a single melisma. They afford the potential to divide up the chant in numerous different ways and the resulting contrast, it would seem, provided a basis from which singers could explore a range of musical ideas in measured polyphony.

Example 2.9  Comparison of DOMINUS tenors F fol. 100v and fol. 149v I
A preliminary consideration of two DOMINUS clausulae, then, already highlights a need to look not only at the techniques for arranging chant within a polyphonic context as a means to analyse these pieces. It suggests that we should look also at the melodic content of particular versions of the chant used within settings; to turn a close eye to differences in the chant melody as a starting point to explore the compositional processes that underlie them. Are these differences related to monophonic practice – different rememberings of the chant melody – or is another explanation required? Put another way, how are variations in the melodic content of tenor melodies to be accounted for – as haphazard variation, or as the deliberate manipulation of chant? Moreover, what can be said of the relationship between a specific version of a melisma used within a clausula and the setting’s overall polyphonic design?

**Scholarly Debates**

That the melodic content of a melisma may vary as it was set as a clausula tenor has already been noted in passing by several previous writers. Important studies by Baltzer and Wright, for example, among the first to point towards this phenomenon, saw the potential for subtle alterations in chant melodies as a feature attributable not only to monophonic practices, but to tenor composition as well.\(^79\) For Baltzer, these melodic variations were drawn upon to support arguments of compositional priority of one piece over another – as in the example of the clausula QUI CONSERVARET, recorded on fol. 169\(^v\) III of F and fol. 61\(^r\) II of W\(^1\).\(^80\) Across the two witnesses of this setting, the tenor is subtly altered so that the version in F includes an additional b as compared to W\(^1\). This additional note, according to Baltzer, makes the F witness ‘work more smoothly’ leading her to conclude that ‘F was “improving” upon the version given in W\(^1\).’\(^81\) With less analytical focus, Wright also notes the possibility for melodic variation among tenor settings of organa and clausulae, which he regards as ‘too numerous and too complex’ to be accounted for by differences in chant practices of particular

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\(^81\) Ibid., 200. Of course, a conclusion of compositional ‘improvement’ is but one of several possible explanations for this melodic change and is it an interpretation based on the assumption of a direct connection between the two versions. Indeed, it is hoped that a methodological approach that considers the range and type of variants across chant and clausula practices may offer a more nuanced account of this phenomenon.
churches or institutions. Consequently, Wright concludes that ‘it is evident that the creator of the organa occasionally “erred” while evoking the chant at the time of composition’, and (though offering no further details) that ‘it is clear that the composer sometimes made minor alterations in the chants for musical purposes’. Wright, Music and Ceremony, 250.

Wulf Arlt’s essay Warum nur viermal also calls attention to a degree of variation among the tenors of clausula settings that cannot be accounted for in chant sources. In what is only a brief introduction to his analysis, Arlt suggests that the possibility for ‘minor interventions’ [kleinere Eingriffe] among these lower voices – for example, the reduction of a repetition from three to two notes in a chant – was just one of a number of techniques available to composers searching for new ways in which to interpret chant materials. Such studies all offer valuable groundwork for a more sustained examination of chant variation, though there remains a great deal more to be said about the nuances and forms of these variants. Even where writers have carefully identified the potential for differences in the plainchant tenor being set, the task of examining how chant melodies may be handled across organa and clausula collections, and why such change occurs, is work still to be done.

In other corners of scholarship, the possibility for variation among clausula tenors is less explicitly recognised. In particular, transcriptions of organa and clausulae in W₁, F, and W₂ published in editions of the Magnus liber organi reveal a somewhat muted acknowledgement of this issue. Among the pages of transcriptions in these volumes, differences in the pitch content of tenor melodies are not handled consistently, even if variants are duly mentioned in accompanying appendices. In the case of the DOMINUS melisma that was discussed above, for example, six transcriptions of clausulae present readings of the tenor that do not reflect the musical notation of the manuscript. In other words, differences in the given pitches of settings are not always maintained in transcription,

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82 Wright, Music and Ceremony, 250.
84 Ibid., 44.
86 This issue has also been raised by Susan Rankin, Review of Les quadrupla et tripla de Paris, ed. Edward H. Roesner, Journal of the Royal Musical Association 122 (1997), 281–288. Here Rankin notes the ‘existence of divergencies between plainsong and polyphonic tenors’ across the organa and clausula repertories (at 284) but that the work of analysing these differences has not been undertaken in the Magnus liber organi editions.
87 These are DOMINUS clausula nos. 27, 29, and 33 in Baltzer, Le magnus liber organi de Notre-Dame de Paris V (respectively, F fol. 149r VI; fol. 149r III, 2; and fol. 150r I), and nos. 58, 89 and 90 in Roesner, Le magnus liber organi de Notre-Dame de Paris VII (respectively, W₁ fol. 49r III; fol. 55r VI; and fol. 55r I).
and editorial intervention has sometimes obscured the scope of this phenomenon. Similarly, in some analyses of clausulae, commentators have simply assumed that settings are consistent in their use of a single chant melisma, or have not been concerned with investigating the potential for difference among them. Anna Maria Busse Berger’s examination of clausulae on the DOMINUS melisma, for instance, seeks to explore questions of musical composition and transmission in this repertory, especially in an oral context, asking how singers ‘might have used rigid structure and repetitive modal patterns’ both to memorise music, and to generate new musical composition.\(^\text{88}\) Interestingly, however, the five different clausulae presented in Busse Berger’s analysis all preserve differing versions of the same chant melody.\(^\text{89}\) This arguably represents one of the most interesting aspects of the settings, especially with regard to issues of memorisation, for the range of variants within these tenor settings raises questions about how such different forms of the melisma came to be known and shared. Indeed, the opportunity to draw upon and explore melodic differences in the chant seems at once to rely upon an inherent flexibility in the melodic material being used, and also a recognition that this flexibility was something to be exploited by singers as they sought to find new ways of rendering that chant in polyphony.

Motet scholars have more often looked closely at the melodic behaviours of plainchant tenors and studies, including those of Mark Everist and Dolores Pesce, have compellingly demonstrated how their manipulation may often serve to facilitate particular structures in upper voices, including refrain quotation and the use of song forms.\(^\text{90}\) Pesce, for example, in her analysis of a PORTARE motet from the seventh fascicle of the Montpellier Codex, suggests that ‘motet composers considered the chant as raw material that could be manipulated to different tonal ends’.\(^\text{91}\) In tracing the extent of such tonal manipulation, Pesce suggests that ‘far from an immutable foundation above which materials were added, there is a growing recognition that [the tenor] was but one building block in a richly intertwined edifice’.\(^\text{92}\) Edward Roesner’s analysis of the motet Ne m’a pas oublié/IN SECULUM similarly draws attention to the ways composers of motets manipulated chant materials, often through

\(^{89}\) Ibid., 188–95. The DOMINUS settings discussed are: \(W_1\) fol. 55\(^{v}\) VI; \(F\) fol. 99\(^{v}\); fol. 149\(^{v}\) III, 1, fol. 149\(^{v}\) III, 2; \(W_2\) fol. 63\(^{v}\).
\(^{90}\) See Everist, ‘The Rondeau Motet’, 1–22; and Pesce, ‘Beyond Glossing’.
\(^{91}\) Pesce, ‘Beyond Glossing’, 37.
\(^{92}\) Ibid.
highly systematic designs. With comparison to contemporaneous Parisian chant books, Roesner observes that the tenor of his chosen motet has been arranged so that every three-note *ordo* of the first tenor statement is repeated directly following its initial presentation. Contrastingly, the second tenor statement alters the chant in a different way, omitting half of the final *ordo*, apparently for structural reasons. Roesner’s explanation for such phenomena is that the very familiarity of this chant melody enabled the composer’s tinkering with it: ‘he knew his audience would notice what he had done and engage with it’. But Roesner stops short of explaining the compositional significance of this tenor manipulation and the very unusual repetition of three-note *ordines*. Instead, his focus is directed towards examining the hypothesis that the tenor of this motet can be seen to function as the primary agent of the ‘music/rhetorical design and sonic spectrum through which the “idea” of the motet is projected’, linking this to a discussion of music and text relations in the setting.

Elsewhere, Catherine Bradley’s work on the Gradual *Propter veritatem* has demonstrated how the alteration of a liturgical melody may be traced across thirteenth-century polyphonic genres, including *organa* and *clausulae*. The purpose of Bradley’s study is to illuminate a more complicated situation of chant adaptation among *organa*, *clausulae*, and motets than has previously been acknowledged, and one that would appear to differ according to genre. Beginning from a comparative analysis of chant books and polyphonic settings on the *Propter veritatem* melody, Bradley builds a case to suggest that two remarkably different forms of the gradual chant were known to singers and that this chant may have been deliberately adapted for musical reasons. In this respect, and even though the *Propter veritatem* chant has relatively few *clausulae* associated with it, her work astutely highlights a need for a more focussed examination of how musicians handled chant melodies across the *clausula* repertory. Responding directly to this need, therefore, my work seeks to offer an in-depth consideration of the ways *clausula* tenors handled melodic variation in their chant melodies. Furthermore, and building on this analytical focus, it also seeks to attune to the musical effects of such chant variation among these polyphonic

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93 Roesner, ‘*Subtilitas and Delectatio*’.
94 Ibid., 36.
95 Ibid., 33.
97 Ibid., 13–21. See also Husmann, ‘*Origin and Destination*’, 327, which was among the first of studies to draw attention to the remarkable flexibility of this chant among polyphonic tenors.
settings, and to examine how this alteration may impact the overall musical design of a clausula.

A critical objective of my analysis, therefore, is to understand just how singers used and adapted their chant melisma in the process of creating a clausula tenor. I do this by focussing on a single portion of chant – the DOMINUS melisma from the Gradual Viderunt omnes. Indeed, DOMINUS makes for particularly rich ground to cover the kinds of variation which occur in clausula collections more broadly, it being one of the most extensively treated melismas in the repertory. From this detailed case study of just one melisma, I hope to make evident the kinds of creative options that were available to singers within this polyphonic context. The underlying aim here is not only to identify areas of variation within the chant that can be attributable to polyphonic practice. More fundamentally, I seek to demonstrate a wider potential for adaptation in the treatment of chant as a clausula tenor – and that this potential for adapting liturgical melodies was something exploited by singers for their compositional designs. My aim, therefore, is not to replace existing ideas about the ways a chant melody may be handled in measured polyphony, but to augment them by exposing a creative engagement with chant material akin to the types of compositional experimentation scholars have already detected in other parts of the repertory. The underlying hypothesis is that creators of clausula appear to have exhibited a pronounced awareness of the possible affordances of chant melodies as they came to formulate their pieces. This in turn suggests a much freer, less rigid engagement with chant melodies in the creation of a clausula tenor than is to be found among Parisian chant books – something that argues for a more nuanced view of compositional possibilities in tenor design in the clausula repertory.

THE CASE OF DOMINUS

The melisma upon the word DOMINUS – the longest melisma in the Viderunt omnes chant – typically spans fifty-seven notes in length in Parisian plainchant sources, with a range of an octave from low to high f.\textsuperscript{98} As the most elaborate part of this fifth-mode melody, the

\textsuperscript{98} The melisma occurs towards the beginning of the verse of the chant. The text of the chant, taken from Psalm 98 follows: Viderunt omnes fines terrae salutare Dei nostri. Iubilate Deo omnis terra: V. Notum fecit Dominus salutare suum: ante conspectum gentium revelavit iustitiam suam. All the ends of the earth have seen the salvation of our God. Rejoice in God, all the earth. V. The Lord has made his salvation known: he has revealed his justice in the sight of the gentiles.
melisma must have certainly been viewed by singers as the premier site in the melody to explore compositional possibilities in a discant texture. Coupled with the fact that this was a chant for one of the most important feasts of the church year, it is hardly surprising to find the DOMINUS melisma treated so extensively in manuscripts, both within *organa* and as separate *clausulae*. Altogether, as a two-voice setting, fifteen different surviving *clausulae* on the melisma are recorded a total of twenty-seven times across the three major manuscripts, presented in Table 2.4.

**Table 2.4** Two-part *clausula* settings of the DOMINUS melisma and their concordances

<table>
<thead>
<tr>
<th>Clausula No.</th>
<th>Manuscript source</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOMINUS 1</td>
<td><em>F</em> fol. 99&lt;sup&gt;e&lt;/sup&gt;</td>
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<tr>
<td></td>
<td><em>W</em>&lt;sub&gt;1&lt;/sub&gt; fol. 25&lt;sup&gt;e&lt;/sup&gt;</td>
</tr>
<tr>
<td>DOMINUS 2</td>
<td><em>F</em> fol. 100&lt;sup&gt;e&lt;/sup&gt;</td>
</tr>
<tr>
<td>DOMINUS 3</td>
<td><em>F</em> fol. 149&lt;sup&gt;e&lt;/sup&gt; IV</td>
</tr>
<tr>
<td></td>
<td><em>W</em>&lt;sub&gt;1&lt;/sub&gt; fol. 49&lt;sup&gt;e&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td><em>W</em>&lt;sub&gt;2&lt;/sub&gt; fol. 63&lt;sup&gt;e&lt;/sup&gt;</td>
</tr>
<tr>
<td>DOMINUS 4</td>
<td><em>F</em> fol. 149&lt;sup&gt;e&lt;/sup&gt; VI</td>
</tr>
<tr>
<td></td>
<td><em>W</em>&lt;sub&gt;1&lt;/sub&gt; fol. 55&lt;sup&gt;e&lt;/sup&gt; V</td>
</tr>
<tr>
<td>DOMINUS 5</td>
<td><em>F</em> fol. 149&lt;sup&gt;e&lt;/sup&gt; I</td>
</tr>
<tr>
<td></td>
<td><em>W</em>&lt;sub&gt;1&lt;/sub&gt; fol. 49&lt;sup&gt;e&lt;/sup&gt; VI</td>
</tr>
<tr>
<td>DOMINUS 6</td>
<td><em>F</em> fol. 149&lt;sup&gt;e&lt;/sup&gt; III, 1</td>
</tr>
<tr>
<td>DOMINUS 7</td>
<td><em>F</em> fol. 149&lt;sup&gt;e&lt;/sup&gt; III, 2</td>
</tr>
<tr>
<td></td>
<td><em>W</em>&lt;sub&gt;1&lt;/sub&gt; fol. 55&lt;sup&gt;e&lt;/sup&gt; VI</td>
</tr>
<tr>
<td>DOMINUS 8</td>
<td><em>F</em> fol. 149&lt;sup&gt;e&lt;/sup&gt; V</td>
</tr>
<tr>
<td>DOMINUS 9</td>
<td><em>F</em> fol. 149&lt;sup&gt;e&lt;/sup&gt; VI</td>
</tr>
<tr>
<td></td>
<td><em>W</em>&lt;sub&gt;1&lt;/sub&gt; fol. 49&lt;sup&gt;e&lt;/sup&gt; V</td>
</tr>
<tr>
<td>DOMINUS 10</td>
<td><em>F</em> fol. 150&lt;sup&gt;e&lt;/sup&gt; I</td>
</tr>
<tr>
<td></td>
<td><em>F</em> fol. 184&lt;sup&gt;e&lt;/sup&gt; III (Statement 1 of <em>F</em> fol. 150&lt;sup&gt;e&lt;/sup&gt; I)</td>
</tr>
<tr>
<td></td>
<td><em>W</em>&lt;sub&gt;1&lt;/sub&gt; fol. 49&lt;sup&gt;e&lt;/sup&gt; I (Statement 2 of <em>F</em> fol. 150&lt;sup&gt;e&lt;/sup&gt; I)</td>
</tr>
<tr>
<td>DOMINUS 11</td>
<td><em>F</em> fol. 150&lt;sup&gt;e&lt;/sup&gt; IV</td>
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<tr>
<td>DOMINUS 12</td>
<td><em>F</em> fol. 150&lt;sup&gt;e&lt;/sup&gt; VI</td>
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<td><em>W</em>&lt;sub&gt;1&lt;/sub&gt; fol. 49&lt;sup&gt;e&lt;/sup&gt; III</td>
</tr>
<tr>
<td></td>
<td><em>W</em>&lt;sub&gt;2&lt;/sub&gt; fol. 55&lt;sup&gt;e&lt;/sup&gt; III</td>
</tr>
<tr>
<td>DOMINUS 13</td>
<td><em>F</em> fol. 172&lt;sup&gt;e&lt;/sup&gt; III</td>
</tr>
<tr>
<td>DOMINUS 14</td>
<td><em>F</em> fol. 172&lt;sup&gt;e&lt;/sup&gt; IV</td>
</tr>
<tr>
<td></td>
<td><em>W</em>&lt;sub&gt;1&lt;/sub&gt; fol. 55&lt;sup&gt;e&lt;/sup&gt; I</td>
</tr>
<tr>
<td>NUSMIDO</td>
<td><em>F</em> fol. 150&lt;sup&gt;e&lt;/sup&gt; III (in retrograde)</td>
</tr>
</tbody>
</table>

The DOMINUS melisma, presented in Example 2.10 from the Parisian missal BnF Lat. 1112, is structured in two parts, marked by an internal repetition in the first section of the melody. The opening section is firmly orientated around c, and this tonal focus is embellished with repeating figures that move between its surrounding pitches. Prominently, the oscillation
between $d-c$, and two descending gestures, from $c$ to $a$, as well as the more expansive $d-a-f$ become characteristic sounds of the first part of the melisma. These first twelve notes of the melisma, marked at $A$, are also directly repeated following a two-note linking figure, at $A'$, giving rise to a tripartite AAB structure. The second part of the melisma, marked $B$, is somewhat contrasting, moving to a lower register, around a low $f$, before an octave ascent and its close on $a$.

**Example 2.10**  **DOMINUS** melisma, BnF Lat. 1112 fol. 20v

First, to issues of the melisma’s transmission among surviving Parisian missals and graduals. In a comparison of fourteen manuscripts – shown in Example 2.11 – it would seem that the **DOMINUS** melody was transmitted, on the whole, very consistently. While small differences in detail can be seen to distinguish some witnesses, the length and pitch content between manuscripts is remarkably unified. The melisma varies in length from fifty-six to fifty-nine notes, though the longest version, preserved in the missal BnF Lat. 15616, most likely contains a scribal error in which the same two-note figure, $a-f$, was copied twice, shown at $X$. This consistency is particularly pronounced in the first section of the melody where only one version preserves a variant form: while most transmit repeated $c$s on pitches two and three, this source (shown in red) presents only one – a difference that is maintained at the repetition of this portion of the melody. Elsewhere in the melisma, two moments can be seen to undergo the most frequent variation, indicated at $A$ and $B$. At both of these sites, the types of variant are not specific to one particular witness of the melody, rather, they are shared between multiple different sources. $A$, for example, highlights a discrepancy in the number of repeated $b$ flats to be sung in the middle of the melisma. While most sources preserve two pitches here, three repeated pitches are copied into three manuscripts (BnF Lat. 1259, Bari, San Nicola, and BnF Lat. 14452). $B$, too, demonstrates different ways of singing one particular section of the melisma – the exact pitch in between the high $c$ and the $f$ appears...
Example 2.11 Comparison of DOMINUS melisma transmission within 12th- and 13th-century Parisian chant sources
an interchangeable one, with both versions serving equivalent functions, mediating a descent in the melody.

The impression gained from this comparison is one of relative stability. All versions preserve the basic structure of the chant melody with only minor variation. And while the explanations for such differences across manuscript witnesses may be quite varied – attributable to contrasting performance practices, different institutional rememberings, or to copying efforts of scribes – the actual range of variants is small.\textsuperscript{99} Given this overall similarity, and also the remarkable consistency of the notation of the melody across witnesses, it can be said with certainty that this melisma was well known to chant singers in late twelfth- and thirteenth-century Paris.\textsuperscript{100}

It is particularly striking therefore that, in the context of the melisma’s treatment as a clausula tenor, such an array of melodic versions can be identified. Across the twenty-seven extant witnesses of clausulae, differences in chant melodies are not only to be found among distinct settings, but they also occur within concordant versions – between different witnesses of a piece. In total, twenty-five unique versions of the chant melody can be identified across these twenty-seven clausulae.\textsuperscript{101} One marker of the DOMINUS melisma’s varied treatment is its range in length. In its shortest form, the melody is fifty-five notes in length, while the longest spans sixty-two notes – a much greater spread than that found within chant sources. But tenors of the same length may also betray considerable diversity in melodic content: differences in the location of the variation, as well as differences in the type of variation give rise to numerous distinct versions of the melisma. Of course, some of the changes found among polyphonic settings can be explained as variant ways of singing the chant – a corollary of the different chant practices documented by sources. One such instance is presented in Example 2.12. In this section of the melody, highlighted at A, chant books can be seen to preserve a mixture of readings in the number of b flats recorded: many have two, but a small group of witnesses preserve three repeated notes at this point, suggesting an underlying fluidity in ways of singing this portion of the chant. In a similar way, polyphonic


\textsuperscript{100} Further evidence supporting this claim is to be found in the use of this melisma in three other fifth-mode graduals: Quis sicut; Qui operatus est; and Omnes de Saba. On this, see Apel, Gregorian Chant, 347.

\textsuperscript{101} See Appendix 2 for a comparison of all twenty-five versions.
settings of the melisma also differ in the number of repeated $b$ flats used in the melody. Notably, the commonest form of this variant within chant sources – melodies with two repeated pitches – also appears within polyphonic settings: twenty of the twenty-seven versions documented within sources preserve two $b$ flats at this point. Here, therefore, is a case where the potential for melodic difference identified within chant witnesses seems to be echoed in the treatment of this melisma within clausula tenors.

**Example 2.12**  Comparison of variants in the DOMINUS melisma among plainchant and clausula tenor sources.

Many other variations within organum and clausula tenors do not have concordances within chant sources. Yet, even if they have no equivalence, a number of differences appear similar in nature to types of variation common to chant sources – in particular, repeated pitches, and ‘filling-in’ intervals with neighbouring notes. The scope of these differences, however, especially in view of the stability with which the melisma is transmitted within chant sources, suggests that they are not all the result of monophonic practice, even if one might imagine the scope of such practices to be greater than those represented by extant sources. In addition, it seems that in many cases, ways of introducing difference within clausula tenors drew upon types of variant common to monophonic practice. Creators of clausulae, I argue, recognised the kinds of variational possibilities inherent to this chant melody and were able to draw upon this knowledge, exploiting these variant forms in order to alter their clausula tenors in subtle ways.
Example 2.13  Comparison of the ending of the DOMINUS melisma across clausula settings

\[\text{\textbf{Example 2.13}}\  \text{Comparison of the ending of the DOMINUS melisma across clausula settings}\]
Perhaps the most striking example of such behaviour can be seen at the end of the DOMINUS melisma. From its highest point (the high $f$) up until the end of the melisma, differences between tenors are substantial: clausulae reveal differences at almost every pitch (Example 2.13). Even on the first note, for instance, some versions present just one $f$; others document a repeated pitch; and another indicates one $f$ in the first statement of the tenor, and two $f$s at its restatement the second time around. Interestingly, the nature of these variants appears largely in accordance with those found in chant witnesses (additional repeated pitches, or the inclusion of a note to fill in a descending interval for example); but viewed together, the sheer scale of this phenomenon within a polyphonic context becomes clear. This suggests that while the general profile of the chant melisma is largely maintained across settings, moving from $f$ to $c$ (with some versions extending to the final $a$), precisely how a tenor realises this melodic movement in practice seems open to quite significant alteration. Moreover, that all these changes occur at this point is also significant, I propose, for it appears to suggest that the ending of the melody becomes a prime site for the possible alteration within a polyphonic setting. It is here that a composer may make necessary changes to the chant material in order to bring together a particular musical design within a piece.

The extent of this melodic variation therefore calls for a close consideration of the ways the DOMINUS melisma was handled as a clausula tenor. The frequency and scope of differences suggests a process of adaptation beyond that which can be explained away as the natural variation of a melody in monophonic practice. The emerging hypothesis, especially in view of the consistency of chant sources, is that the DOMINUS melisma was handled with a level of melodic flexibility that begins to speak of a creative latitude in the polyphonic treatment of a melisma; a freedom in the setting of chant whereby the given pitches of the melisma may be altered at particular points. By turning a close eye to these variations, I now seek to examine how the potential for adaptation in the melodic content of the melisma may be used by singers to influence the compositional design of a clausula. This, in turn, will lead to a consideration of the musical impact of chant adaptation on the upper voices of settings, where I propose that the manipulation of clausula tenors served as the stimulus for a range of

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102 A similar focus of chant adaptation at the end of a melisma can be seen in the ‘mini clausula’ setting on the VERITATEM melisma discussed in Bradley, *Polyphony in Medieval Paris*, 18–20, though such a point is not elaborated upon in Bradley’s analysis, perhaps on account of the small number of surviving clausulae upon this portion of chant.
contrasting compositional efforts, offering singers the means to devise highly varied polyphonic recensions of the DOMINUS melisma.

CHANT MANIPULATION AND CLAUSULA DESIGN

I) TENOR PATTERNS AND MELODIC VARIATION

One explanation for the high degree of melodic variation discernible among clausula tenors on the DOMINUS melisma, I suggest, appears linked to the process of arranging the chant melody into rhythmically measured patterns. This is because the specific length of rhythmic patterns used among DOMINUS tenors varies considerably, ranging from three to seven notes. It would seem that a necessary implication of these differing tenor designs – in order to ensure rhythmic and melodic components align at the end of a setting – is the need for a certain compositional flexibility in the treatment of the chant melisma. Indeed, such decisions concerning the rhythmic and melodic alignment of tenors have been handled in one of two ways across DOMINUS clausulae. Either, the rhythmic pattern is adapted in some way to coincide with the end of the chant melody, or it is the chant melody that needs to be subject to alteration. Interestingly, the latter solution appears to be the one most commonly chosen by singers; the result is a high degree of melodic adaptation across rhythmic designs.

A comparison of three clausulae that use rhythmic patterns of different length appears to support such a hypothesis. Shown in Example 2.14, the first clausula, copied on fol. 149r of F, employs a rhythmic pattern formed of recurring units of three longs (indicated by brackets above the melody in the example). Since the portion of the chant melody treated in discant in this setting totals fifty-seven notes in length, the rhythmic pattern divides up the melisma into nineteen equal phrases; two remaining pitches are treated as an organum purum close. It would therefore seem that the particular version of the melody and the rhythmic pattern of the setting have been devised in such a way that the three-note phrases fit neatly against the given pitches of the chant. The specific length of the chant has enabled this rhythmic scheme to be realised within the clausula.

Another setting found embedded within an organum in W2, however, employs a rather different version of the melisma – apparently a result of its different rhythmic arrangement. In this case, rather than a three-note figure, the DOMINUS melisma has been set to a five-note
pattern. Here, the tenor melody differs at two main areas compared to the first clausula (highlighted in the example): the middle of the melody sees a reduction of repeated f’s and b flats, while the ending now contains just one high f, but two ds after the syllable change to ‘mi-nus’. Consequently, this tenor is two notes shorter than the first example – a total of fifty-five pitches are set in discant, with the same two-note cauda at the end. The five-note pattern thus portions up the chant into eleven phrases. This important change in the melodic content of the chant in this clausula results in the alignment of a five-note pattern with the melisma in a way that would not have been possible with the previous fifty-seven notes set in discant.

Example 2.14  Comparison of DOMINUS clausula tenors across different rhythmic patterns

A third example, found on fol. 149v III, 2 of F renders the chant according to a seven-note rhythmic pattern. This particular recension of the chant – which now sets fifty-six notes in measured rhythm, again with a two-note purum close – enables the rhythmic pattern to fit exactly onto the chant melody, since the pattern divides up the fifty-six notes into eight

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103 This clausula is also preserved in W1 fol. 55r VI, with a slightly different tenor: the W1 version does not include the final two notes of the melisma set in organum purum, and the twenty-fifth note of the melisma is a g, not an a.
equal phrases. Once more, it would seem that particular variations in the melisma have enabled this seven-note rhythmic pattern to fit neatly against the chant melody, resulting in the alignment of rhythmic and melodic elements at the end of each setting. While the middle of the melody corresponds exactly with the chant also used for the $W_2$ setting, the end of the melisma differs from all other tenors, now containing three repeated $d$s after the syllable change to ‘mi-nus’.

Viewed together, the level of coordination between these two elements across the *clausula* examples seems to be more than happenstance. Rather, it suggests a discernible relationship between the specific rhythmic pattern of a tenor and the particular version of the melisma drawn upon by singers. Moreover, since none of the three melodies presented in the example have any concordance in chant books, or indeed, any other polyphonic settings on the melisma, the variation in length among these tenors points towards a conscious alteration of the melody in order to fit the singers’ compositional idea. But in addition to the alignment of melodic and rhythmic components, what is particularly interesting in these examples is a high level of consistency in the sites at which tenor variation occurs across settings. That is, though the melodic content of the three tenors is subject to frequent change, it would appear that singers recognised the potential to adapt their chant materials at specific points in the melody – most especially at the end of the melisma. Appearances of this shared chant foundation thus seem far from fixed. Instead, the discernible relationship between the melodic content and rhythmic organisation of tenors suggest the DOMINUS melisma was subject to a pronounced degree of manipulation across different rhythmic formulations – a compositional strategy that consequently enabled singers to experiment with this melody in numerous different rhythmically patterned designs.

Looking still closer at the rhythmic designs of these *clausula* tenors, by far the most common of arrangements recorded within surviving manuscripts is the organisation of the DOMINUS melisma into recurring units of three longs. Four different *clausula* settings (with ten witnesses preserved across sources) make use of this rhythmic pattern, and equivalent settings are sometimes copied twice in the same book.\footnote{For example, $F$ fol. 184$^r$ III = cursus I of $F$ fol. 150$^e$ I and $W_1$ fol. 49$^e$ III = $W_1$ fol. 55$^v$ III.} As one might now come to expect, these ten witnesses each record subtly contrasting versions of the DOMINUS melisma: differences in length and in the individual pitches of the melody used, particularly at the end of the melisma, mean that every one of these *clausula* tenors is an *unicum*. But among the
Example 2.15  Comparison of DOMINUS clausula tenors based on an LLL rhythmic pattern
tenor voices set in this rhythmic pattern, it is interesting to note that several shared variants can be seen to obtain across settings. These common variants are also of special import to a study of chant manipulation I suggest, for their occurrence begins to indicate the existence of similar approaches of singers handling the DOMINUS melody in this particular rhythmic pattern.

One striking similarity to be found across tenors set in this recurring three-note design is shown at A in Example 2.15. Here, we find an additional note in the melisma unique to this rhythmic pattern: this variant does not occur in any other polyphonic settings, nor is this particular change found in chant sources of the melody. As the example demonstrates, in all but one case, this extra note is an f, repeating a pitch of the chant before moving to the b flat; the only exception can be found on fol. 184v of F, which instead includes a repeated a. This new note (in either form) is significant, I suggest, because its widespread use across these clausula settings speaks to an underlying relationship between this particular rhythmic pattern and the version of the melisma singers came to use. Taking this idea further, the unique addition of a repeated note at this moment seems to indicate that a certain way of singing the DOMINUS melisma – with this variant – came to be associated specifically with its arrangement into three-note rhythmic patterns. This particular version of the chant conceivably came to be familiarised as a way of creating a clausula tenor according to this rhythmic design. In turn, and as singers recast and reformulated their tenors into further clausula compositions, it seems highly likely that this addition became established as a common variant of the melisma. In view of its consistent usage across this specific tenor design, one might thus be tempted to view this additional note as a melodic feature of the melisma that was readily taken up and explored by singers making use of this LLL rhythmic model, indicative of a cumulative process of chant variation in clausula composition.

The addition of an a (rather than the more common f) found in the clausula on fol. 184v III is a melodic variant unique to this particular setting in F that requires further explanation. However, as one of three witnesses of the same musical setting, (found also on fol. 150r I of F and W1 fol. 49v III) its occurrence may be accounted for by looking up from the chant foundation of the clausula, and to a comparison of duplum voices. For here, it becomes clear that more common variant of f – present in the two other witnesses of this setting – creates a dissonance of a seventh with the duplum e, at A in Example 2.16. Interestingly, the witness on fol. 184v, now with an a in the tenor, avoids such an interval and instead sounds a perfect fifth between voices. The most convincing explanation for this
variation in the DOMINUS melisma, I therefore propose, is based on a concern for consonance within this clausula setting. While the other versions of the clausula made use of the far more common form of variant (an $f$), the creators of this clausula would seem more concerned with the resulting dissonance between parts – a motivation that resulted in the deliberate alteration of a pitch in the chant melody. Such an example is all the more significant because it appears to illustrate a case where variation in tenor pitches is generated by the material contained within the clausula’s upper voice – an observation that goes against the expected hierarchy of parts in which upper voices are seen as a ‘response to’ pre-existent chant melodies. And whatever the chronological relationship of these witnesses, the occurrence of subtle differences between settings – especially in settings so closely related – clearly highlights the potential for tenor variation driven by specifically compositional interests.

Example 2.16  A comparison of DOMINUS clausula $F$ fol. 184$^v$ III and fol. 150$^v$ I

II)  IMPLICATIONS FOR DUPLUM VOICES

Two clausulae on the DOMINUS melisma copied in close proximity to one another in $F$ provide particularly clear examples of the effect that melodic variation in the tenor voice has on the duplum parts of settings. First, in order to highlight the scope of chant variation in these clausulae, Example 2.17 presents a comparison of their tenors against the Parisian missal BnF Lat. 1112. The point of this comparison, however, is not simply to isolate pitches of the tenor melodies that appear to have been adapted from the ‘source’ chant. Rather, it is to
begin to demonstrate a more complicated situation of tenor variation, in which melodic difference may be introduced at several points in clausula settings in a way that cannot simply be accounted for as the addition or omission of notes to a plainchant source. The deeper aim of this analysis is to demonstrate a much more flexible approach to handling chant melodies in this polyphonic context and it is hoped that an investigation into the relationship between tenor arrangements and the design of the clausula as a whole will help to clarify why a particular version of the melisma has been chosen for a specific setting.

Example 2.17  A comparison of the DOMINUS melisma in BnF Lat. 1112, F fol. 149IV, and F fol. 149III, 1

It is clear the two clausula tenors presented in Example 2.17 are distinct in length and pitch from one another, as well as from the chant melody preserved in Parisian missal BnF Lat. 1112. Specifically, the melisma used in the clausula on fol. 149IV of F differs in three places as compared to its counterpart on fol. 149III, 1: a difference in pitch in the first part of the melisma, and two variations in length towards the end. Such differences precipitate substantially varied treatments of the chant between clausulae, informing the way that the
melisma is portioned up into smaller melodic units and set in a rhythmic pattern. Most obviously, in the first *clausula*, the tenor’s fifty-five notes set in discant have been rendered into a five-note pattern while the second tenor is organised according to a six-note figure. In both cases, the formal scheme of the piece – the rhythmic design, the melodic organisation, and consequently, the setting’s overall structure – is contingent on the specific version of the chant being used. On a more detailed level, the decision to sing one or two *cs* at the point marked *A* in the example alters the placement of the high *f* – the highest pitch in the melisma. In the first *clausula*, this *f* is positioned at the end of the penultimate *ordo*, while in the second, it appears at the beginning of the final phrase, marking a descent of a fourth in the tenor. This different emphasis fundamentally alters the way the chant is to be heard – the variation between given pitches of the melisma, and the subsequent organisation of the chant in rhythmic measure, results in the ‘high point’ of the chant being set at contrasting points. The outcome of this particular variation, therefore, enabled musicians to voice this characteristic of the chant in two quite different compositional contexts.

The first of the *clausulae*, presented in transcription as Example 2.18, divides up the chant melisma into a five-note rhythmic pattern comprised of two parts – a double long, long figure followed by three longs – establishing a natural antecedent-consequence relationship within the tenor design. Above this, as several commentators have already observed, the duplum voice explores a limited set of ideas that come to be used repeatedly throughout the piece.\(^{105}\) Two upper voice figures stand out in this regard: the first, marked *A*, is a rising gesture formed of three longs; the second is an extension of this, now four notes in length, indicated at *A’* in the transcription. The consistency by which these ideas are used in the *clausula* is striking, revealing what Baltzer has described as ‘a composer’s delight in being able to repeat a single duplum idea and have it “work” over different segments of the tenor’.\(^{106}\) But where previous commentators have looked only to the duplum voice to understand the structure of this *clausula*, it becomes clear that a number of melodic interconnections between figures, especially when viewed against the framework of the tenor, suggests an altogether more tightly-knit design than has previously been reported – one defined by the rhythmic organisation (and by extension, the melodic content) of the chant melisma. For instance, at almost every iteration of the tenor’s five-note pattern, the *A* or *A’* figure of the duplum can be heard consistently over the initial double long, long unit – the

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\(^{105}\) See analyses by Baltzer in ‘Notation, Rhythm, and Style’, 291; and Busse Berger, *Medieval Music*, 189.

\(^{106}\) Baltzer, ‘Notation, Rhythm, and Style’, 291.
Example 2.18  DOMINUS, F fol. 149r IV
rising melodic idea has been set against the ‘antecedent’ portion of the tenor’s rhythmic design (shown in the example). The response to this figure, indicated at B, typically beginning on an e, is consistently reused and reworked over the three-long element of the tenor, as an ‘answer’ to the first part of the pattern (shown as B’). In this way, the bipartite phrase structure established by the tenor’s five-note rhythmic pattern can be seen to influence the melodic material explored by the duplum voice in a very systematic way. The underlying point here is that this clausula has been designed with a clear periodic structure in mind, and the specific length and melodic content of the tenor melisma chosen has helped to facilitate this design.

The clausula on fol. 149v III, 1 of F handles its version of the DOMINUS melisma in an altogether different manner (Example 2.19a); the tenor is not only one note longer, but it also differs in pitch content at several points as compared to the previous example. Organised into a six-note rhythmic pattern, the melisma is portioned up into nine phrases: within this arrangement, the first eight reliably adhere to the tenor’s second-mode design – the final ordo, however, departs from this rhythmic pattern. Specifically here, at the change of syllable ‘do-mi’, the rhythmic pattern has been altered so that two longs are added to the beginning of the final phrase (highlighted in the example). Importantly, this also coincides with the omission of one of the two repeated cs typically found at this point in the chant melody.\textsuperscript{107} The effect of this alteration in both the rhythmic arrangement and melodic content of the tenor is a renewed musical focus on this part of the setting – this change places new emphasis at a moment where the highest point in the chant, as well as a change in syllable can be heard. For singers, this musical alteration may have served to signal the imminent ending of the clausula, or perhaps, to draw attention to its creator’s decision to adapt the chant melody at this point. At the least, it seems to have been a change noticed by the scribe, though it apparently caused some issue in the process of copying.\textsuperscript{108} Syllable changes are handled deftly at this moment, but an erased c in the tenor at ‘do-mi’ speaks to an awareness on the part of the scribe of a change in rhythmic and melodic design of the melisma, precisely at the moment where the tenor chant differs from any other polyphonic or monophonic point of reference (see arrow in Example 2.19b).\textsuperscript{109}

\textsuperscript{107} On this, see Appendix 2.

\textsuperscript{108} This is a moment that is also mis-transcribed in Baltzer, \textit{Le magnus liber organi de Notre-Dame de Paris V}, no. 29.

\textsuperscript{109} For a similar case of copying difficulties encountered by the scribe of F at a moment of chant adaptation, see the case of LATUS in Rankin, ‘Thirteenth-Century Notations’, 126.
Example 2.19a  DOMINUS F fol. 149° III, 1

Example 2.19b  Erasure detail in F fol. 149° III, 1
As in the previous clausula, the rhythmic arrangement of the tenor in this setting also gave rise to a duplum voice organised according to a clear periodic design. Throughout the clausula, the phrase structure of the upper voice consistently equates to one or two ordines of the tenor. And this is a design that becomes marked melodically by the duplum, since the beginnings of phrases (and often the end as well) are typically characterised by a two-note figure set in longs. More significantly, every break in the duplum can be seen to coincide with the end of a phrase in the tenor, suggesting careful co-ordination between the two voices – a moment that always produces a harmonic interval of a unison or an octave, as indicated in boxes in Example 2.19a. Once more, therefore, though in quite a different way, the musical attributes of the tenor melody can be seen as a platform from which to control the structure of the setting. Above this platform, duplum voices evidently responded imaginatively to these contrasting tenor attributes, drawing out and reacting to melodic properties of the chant in pronounced ways.

* * *

The DOMINUS melisma, as it came to be set as the tenor of multiple clausulae, was clearly subject to a level of melodic variation on a scale far greater than is to be found in contemporaneous chant books of the melody. Moreover, the sheer scope of this phenomenon – where almost every clausula witness preserves a different version of the melisma – has come to suggest this variation was principally the result of the chant melody’s transformation into rhythmically measured tenors. Singers, it would seem, were well aware of the potential to introduce variation in length and given pitches of this melisma, and in formulating their tenor designs, they experimented with compositional possibilities newly presented by this process of adaptation. In consequence, and as the melisma came to be reworked in multiple different polyphonic recensions, the cultivation of melodic variation among the DOMINUS melody afforded singers a myriad of ways to test out musical possibilities for clausula composition. One conclusion already to be drawn from this process is the recognition of a new level of artistic freedom in the treatment of chant previously unseen in a liturgical context, where concerns for polyphonic design can evidently be seen to take precedence over liturgical function.

Of course, in the context of monophonic chant practices, the DOMINUS melisma was itself subject to a degree of variation in melodic detail. Across its transmission among chant
sources, the possibility for small differences in individual notes and in melodic figures speaks to an inherent flexibility in this material as it came to be known by singers. I propose that this potential for variation was something creators of clausulae came to exploit, centring around moments in the chant that were more susceptible to change: junctures in the melodic structure, or note repetitions, for example. These areas, it seems, were subject to significant reformulation as clausula tenors, and the nature of adaptation in a polyphonic context appears remarkably similar to types of variant that might be expected in chant sources. The scale of this variation, however, makes a strong argument for singers manipulating chant in the process of clausula composition, and that they deliberately introduced variants that were often similar in nature to those found among chant books. Significantly, these changes seem to have been confined to particular areas of the chant and in the case of DOMINUS, it is the final portion of the melody that becomes a prime site for adaptation. This is an observation that adds further weight to the hypothesis that singers were manipulating their chant melisma for compositional reasons, I argue, since it suggests that the highest degree of adaptation occurred at a point where the need to coordinate compositional elements is greatest.

My focus upon just one clausula ‘family’ has revealed how multiple versions of a chant melisma may give rise to strikingly different polyphonic designs. It remains to be said that other melismas may handle their chant melodies in different ways. But when tenor settings of the DOMINUS melisma are presented side by side, the potential for melodic variation becomes especially visible – the emerging picture is that such change was driven by a wide range of musical motivations. One principal concern seems to be a desire to coordinate rhythmic patterns of clausula tenors with the length of the chant. In response to this compositional consideration, it appears that singers evidently drew upon the potential flexibility of their plainchant materials, exploiting the newfound freedoms presented by chant manipulation in order to devise clausula tenors based on a broad spread of rhythmic patterns. But multiple settings based on the same rhythmic pattern may also betray affinities to particular types of variants. In the case of tenors organised into a three-long rhythmic pattern, an additional pitch came to distinguish these settings from all other polyphonic and monophonic witnesses, suggesting a level of compositional reworking based on what is itself an adapted version of the chant. And arising from these unique recensions of the melisma, duplum voices may be carefully tailored to the specific structural design of the tenor. It would seem that, in tandem with the exploration of chant manipulations, singers experimented with ways to add emphasis onto portions of the chant, or to draw out particular
periodic designs established by tenor voices, through the formulation of upper voices – an approach that provided additional means to interpret and reformulate the chant melody.

One significant implication of this potential for chant manipulation among *clausula* tenors concerns methodologies that seek to tether polyphonic tenors to particular institutional practices of singing chant.110 For if it were possible for singers to make changes to chant melodies in the process of composition, attempts to argue for a connection between a specific tradition of chant singing and a *clausula* tenor now appear increasingly difficult, since it becomes clear that melodies may not lead back to particular institutional ways of singing the chant. In addition, and more directly related to an argument of compositional process, this evident cultivation of difference in chant melismas appears to signify a fundamental change in perception in the way a melisma came to be handled in a polyphonic context. Notably, it is clear that singers were able to introduce a range of categories of difference to chant melodies and the bulk of adaptations which a singer would be comfortable making to a chant were often subtle.111 Cumulatively, these differences demonstrate that singers were willing to adapt liturgical melodies for compositional purposes.112 In so doing, it illustrates an imaginative engagement between the creator of a *clausula* and his chant material, in which chant manipulation might now be viewed as a prevalent strategy in the formulation of a *clausula* tenor.

110 See, for example, Husmann ‘The Enlargement’, and ‘Saint-Germain und Notre Dame’. One further study espousing this methodological approach, though in the context of later motet repertories, can be found in Anne Walters Robertson, ‘Local Chant Readings and the *Roman de Fauvel*’, in Margaret Bent and Andrew Wathey, eds., *Fauvel Studies: Allegory, Chronicle, Music, and Image in Paris, Bibliothèque Nationale de France, MS français 146* (Oxford, 1988), 495–524. Here, Walters Robertson demonstrates quite convincingly the potential to link melodies with local traditions of singing chant, suggesting that several melodies used as motet tenors probably came from outside of Paris, perhaps from Arras.

111 These categories of difference introduced into a tenor melody seem to be informed in part by singers’ ‘appetite for risk’ when composing a *clausula* – how far they wanted to experiment with and manipulate a chant melody and what sort of polyphonic design they sought to construct.

112 My comparison of *clausula* tenor melodies to relevant Parisian manuscripts, in this regard, has highlighted valuable points of difference between monophonic and polyphonic practices that demonstrate the importance of chant analysis (rather than relying on comparison to the *Liber Usualis*, for example, as in Tischler, ‘The Parisian Two-Part Organa’).
5. ARTICULATING CHANT

Thus far, this chapter has considered the relationship between monophonic practices of chant and the tenors of clausula settings, analysing the interpretative process by which chant materials were rendered into rhythmic measure. It has argued that the apparent kinship between chant melodies and some clausula tenors underlines a deep connection linking monophonic chant traditions and discant composition. At the same time, it has also shown that a degree of flexibility can be traced in the given pitches of chant melismas, marking these melodies quite distinctly as musical material – something with which to be experimented – and it would appear that purely compositional impulses sometimes took precedence over melodic fidelity to the chant. This has all begun to suggest that clausula tenors reveal contrasting levels of distance from chant practices recorded within liturgical chant books – that the broad spectrum of approaches to plainchant foundations reveals differing degrees of affinity to monophonic chant traditions. Taking my cue from these different expressions of chant among polyphonic tenors, I wish now to investigate the ways in which singers responded to the specific musical properties of their chosen chant melodies as they created a clausula tenor – to explore how such features could be drawn upon and newly articulated in a discant context.

Questions concerning the musical design of clausula tenors, and specifically, the ways singers were able to call attention to certain features of a pre-existent melody in rhythmic measure have not been dealt with directly in scholarship to date, nor have the implications of such compositional efforts been fully understood. That said, several writers have already noted the possibility of clausula tenors to handle their material in a way that appears sympathetic to the character of the original plainchant melisma. In Rebecca Baltzer’s discussion of rhythmic designs used across tenor settings, for instance, she highlights a clausula example – based on a melisma, IILI, from the Gradual Ecce sacerdos (M50) – which she argues ‘takes clear advantage of the aab structure of the chant’. Based on a second mode pattern, the clausula (found on fol. 169v II of F) employs a design in which an underlying repetition of the first seven notes in the chant is reciprocated in the rhythmic arrangement of the tenor, resulting in the first and second tenor ordines having the same pitch content. The two A sections of the chant are thus handled in a way that draws attention to the underlying structure of the melisma through its rhythmic rendering – the chant’s melodic

113 Baltzer, ‘Notation, Rhythm, and Style’, 204.
repetition has become a characteristic of the _clausula_’s tenor design as well. Similarly, Norman Smith offered a brief comment on this phenomenon in another part of the _clausula_ repertory, focusing upon a setting of the _REGNAT_ melisma (from _Alleluia V. Hodie Maria_, M34) – a melody also structured in an AAB pattern. In his essay examining tenor repetitions in _organum_ and _clausula_ collections, Smith analyses a two-statement setting of the melisma found on _F_ fol. 166^⅖ VI, arguing that its creator’s recognition of ‘the melodic structure of the tenor as a whole’ shaped the overall form of the _clausula_ quite explicitly.\(^{114}\) This is because the _clausula_ tenor omits the last ten notes of the chant melisma (essentially, the chant’s B section) in its first statement, thus giving rise to an AA/AAB structure. The implication is that an awareness of the underlying melodic units of the chant became a basis from which an unusual compositional structure was realised.

Also interested in the _REGNAT_ melisma, Catherine Bradley suggests a somewhat contrasting way in which singers engaged with the melodic structure of this specific chant. Focusing on two _clausulae_ in particular, she proposes that another compositional game played by singers in these settings lay in the way that they actively obscured melodic repetitions within the chant. The two _clausulae_ in question, _REG[NAT] 6_ and _REG[NAT] 8_, Bradley argues, afford priority to a regular, patterned grouping of pitches ‘at the expense of melodic repetitions inherent in the plainchant itself’.\(^{115}\) Eschewing the melodic structure of the melisma in favour of a more consistent phrase design, she suggests that singers were able to create _clausula_ settings based on the repetition of melodic ideas that ‘were not obviously suggested or facilitated by the underlying tenor melisma’.\(^{116}\) The conclusion she comes to draw is that part of the compositional challenge in creating these _clausula_ tenors may not only have been in drawing attention to inherent repetitions of the chant melisma, but also in finding ways to suppress that structure in favour of others, devised within a new, polyphonic context. For the decision to go against the underlying structure of a melisma in a _clausula_ tenor must have also been a deliberate compositional decision, and one that overtly plays against the way in which singers and listeners would have known the chant in its monophonic context. As such, opportunities to engage with properties of the chant melody may give rise to some tenor settings that foreground underlying structures, but they may also result in _clausulae_ that test out these features in more unexpected ways, for instance, in actively


\(^{115}\) Bradley, _Polypophony in Medieval Paris_, 86. _REG[NAT] 6_ can be found in _F_ fol. 166^⅖ V and _REG[NAT] 8_, on _F_ fol. 166^⅖ VI.

\(^{116}\) Ibid., 90.
concealing structural repetitions. Viewed collectively, these different compositional strategies reflect a keen awareness of monophonic traditions of singing chant while also demonstrating a desire, on the part of singers, to play with this chant heritage, re-imagining these pre-existent melodies in new polyphonic situations.

If these existing studies have demonstrated the ability of clausula tenors to articulate features of chant melodies in rhythmic measure, there remains considerable scope to look in more detail at the specific features that singers sought to highlight, and particularly, at the mechanisms by which this was achieved. Most obviously, and already proposed above, the articulation of the underlying structure of a melisma in the design of the tenor appears to have been a strategy often utilised by singers. But in other situations, characteristics of the chant less immediately apparent in a monophonic context may be given new prominence as a result of their rendering in discant; indeed, a purpose of this discussion is to explore other strategies by which singers engaged with their chant materials when transforming them into clausula tenors. In both cases, I come to argue, these moments demonstrate how chant melodies themselves provided ample opportunity for compositional experimentation, where their organisation into smaller melodic units enabled these old melodies to be heard in new ways.

**MELODIC STRUCTURE: ET CONFITEBOR**

The clausula on the melisma ET CONFITEBOR (from the Alleluia chant Adorabo ad templum sanctum tuum, M12) copied in F fol. 154v II provides a particularly clear example of a tenor whose rhythmic pattern articulates a recurring feature of the chant. Shown in Example 2.20, the version of the chant used in this clausula is formed of fifty-seven notes: fifty-six are rendered in discant, repeated twice, with the final syllable ‘-bor’ on a single note set in a final organum purum close. The chant melisma itself is structured in a standard AAB form, where the first twenty-one pitches of the melody (marked at A) are directly repeated (A’), followed by a final, melodically contrasting phrase comprising fourteen notes (B). In view of this basic structure, the rhythmic design of the clausula appears carefully planned. For this recension of the ET CONFITEBOR melody has been portioned up by a recurring seven-note pattern that closely imitates the underlying structure of the chant. As the example demonstrates, the first three ordines of the tenor correspond precisely to the A section of the chant; the following three to the second A section; and the final two align with the B section. Moreover, this
design seems to work particularly well in a clausula containing two statements of the chant, since the repeat of the melisma aligns perfectly with the beginning of the rhythmic pattern, so that the second tenor cursus presents exactly the same underlying melodic repetition. Consequently, and in a pronounced way, the inherent structure of the melisma has been newly emphasised as a result of its rendering in measured rhythm: the creator of this clausula seems not only to have been aware of the structural properties of the melisma, but that a rhythmic design was purposefully conceived to articulate this feature of the chant.

Example 2.20 ET CONFITEBOR clausula tenor, F fol. 154v II

There is more still to be said about the rhythmic arrangement of this tenor, especially in consideration of the specific version of the melisma used in this clausula. For, notably, this tenor melody is an unicum, found in no other liturgical polyphonic setting of the chant, and it seems that a degree of flexibility in the melisma’s given pitches has served to facilitate the
compositional design of the setting. The first case of such melodic variation, shown in red in the example, is the addition of a g in the tenor’s fourth phrase. Interestingly, this is a note I have found in only one contemporaneous Parisian chant book, BnF Latin 1107 – a 13th-century missal from St. Denis (this source is presented in comparison with the clausula’s tenor in Example 2.21). The majority of other chant sources typically record a rising scale f-g-a in the first instance (marked at x in the example), but at the repetition (y) preserve only two notes, f-a. The effect of this g is significant to the design of the clausula’s tenor, I suggest, because it appears to add emphasis to the internal repetition of the chant; this addition results in an exact mirroring of the very opening of the melisma, creating an obvious symmetry that is drawn out by the tenor’s rhythmic design. One motivation for the singer’s use of this form of the melisma may thus have been to maintain an exact melodic repetition with across both A sections, and crucially, to mark this repetition out precisely onto the seven-note rhythmic pattern of the tenor.

A further melodic difference between chant sources and this clausula suggests a still closer relationship between the tenor’s rhythmic design and the particular version of chant melisma used. This variant, highlighted in the example at z at the end of the ET CONFITEBOR melody, is once again an unicum in this polyphonic setting. Specifically, here, two additional notes – an f and g – appear to have been inserted into the chant as compared to other witnesses; these two additional notes (occurring in both statements of the tenor melody) play an important role in the clausula’s overall design. Most importantly, their inclusion extends the length of the melisma so that the given pitches are now able to align with the seven-note design of the tenor – as a result, the fifty-six notes of the chant now coincide exactly with the rhythmic scheme of the setting. The point at which this change is made also seems significant: the creator of this clausula appears to have made the alteration at a moment where the melisma was already circling around f and g – that is, the melodic manipulation was introduced at an inconspicuous site in the chant so that its basic melodic character would remain largely unchanged.

117 The given pitches of this melisma are, however, also found in related motets De virgula veris inicio; Ecclesie princeps et domine; and Le jus tent en mei. See Hendrik van der Werf, Integrated Directory of Organa, Clausulae, and Motets of the Thirteenth Century (Rochester, NY, 1989), 29.
Already, several important techniques used by singers to articulate properties of chant can be distilled from this example. First, it is clear that the underlying structure of the chant was known to singers and recognised as a distinct compositional strategy for arranging the melody as a tenor; clearly, a desire to bring out this structure directly influenced the rhythmic design of the setting. Second, in seeking to articulate the chant’s internal repetitions, singers were able to handle the melisma with a certain degree of flexibility – most significantly, in adapting the number of notes in the melody. This appears to demonstrate a willingness not only to highlight properties of the underlying plainchant through rhythmic measure, but also, a readiness to adapt the version of the chant used. More broadly, while it is clear that melodic characteristics of a chant are able to influence the organisation of clausula tenors on a basic level, the ET CONFITEBOR clausula has also illustrated how the re-contextualisation of chant in measured polyphony provided new opportunities to bring certain features of these pre-existent melodies to the fore. A corollary of these new compositional opportunities is a renewed recognition that singers were able to handle their chant materials with a degree of flexibility in order to achieve their particular polyphonic designs.
INTERNAL REPETITIONS: LATUS

Another way in which singers were able to experiment with the melodic properties of chant melismas is exemplified in the multiple clausula settings of a portion of the Easter Day melody Alleluia V. Pascha nostrum – the melisma LATUS. Among these clausulae, it becomes clear that, in addition to decisions about the version of the chant melody used (including choices about the alteration or addition of notes), variation in the starting point of the discant passage on the melisma also enabled singers the opportunity to emphasise melodic properties of the chant differently. Indeed, the degree of experimentation with starting pitches of the melisma in clausula settings on LATUS seems especially pronounced, since this was a melody that came to receive considerable treatment by singers: twelve two-part settings are recorded a total of twenty times across the manuscripts W1, F, and W2.118 Across these settings, it would appear that singers sought to exploit the contrasting musical possibilities presented by beginning clausulae at different points – a compositional strategy that, as will be discussed below, draws out quite different melodic features of the chant.

In an essay examining several polyphonic settings of the LATUS melisma – in particular, the motet Latex silicie, its concordances, and its related clausula – analytical work by Susan Rankin has already called attention to the potential for creators of motets and clausulae to manipulate chant melodies, including the starting point of the melisma.119 Arguing for the central role of the clausula’s musical structure in understanding the complex transformations of material across its transmissions, Rankin demonstrates that the clausula in question, on fol. 158v II of F, differs ‘more radically from the chant’ than any other clausula setting, since it begins on the fourth note of the melisma, and omits several further notes, especially at the end of the melody.120 One of the results of beginning the clausula on the fourth note of the melisma, Rankin shows, is the formulation of a new tonal plan for the setting as compared to the original chant, where the tenor outlines a move from high to low c over the course of the melody.121 That is, the decision to begin the clausula at this particular point apparently gave rise to a new set of compositional possibilities that came to be worked out in this setting. To take this idea further still, I now want to suggest that evidence of play

118 For a list of witnesses and concordances, See van der Werf, Integrated Directory, 36–8.
119 Rankin, ‘Thirteenth-Century Notations’.
120 Ibid., 127.
121 Ibid., 140, no. 59.
with properties of the melisma is especially extensive among the **LATUS clausulae**, and moreover, that testing out the compositional implications of this manipulation seems to have been a particular tactic on the part of singers. Crucially, I propose, the ability to reshape the chant melisma in this way can be seen to draw out a range of different features of the tenor melody, offering singers new opportunities to articulate this chant in rhythmic measure.

**Example 2.22**  Comparison of starting notes of two-part **LATUS clausulae**
Across the twelve two-part settings of \textit{LATUS} \textit{clausulae}, three different possibilities for the starting note of settings can be identified, presented in Example 2.22. No \textit{clausula} begins on the first pitch of the chant melisma, but the second note, a $c$, is used as the starting note of five distinct settings (and six witnesses), making it the most common point for a \textit{clausula} to begin across the repertory. Following this, in descending order of frequency, four settings (with six witnesses) begin on the melisma’s fourth note – the same pitch as the second note; lastly, three \textit{clausulae} (across five witnesses) begin on the third note of the melisma, a $d$. The effect of this variation in starting notes among \textit{clausulae} seems to have been actively exploited by singers creating their tenor arrangements, as becomes clear in the setting recorded on $F$ fol. 158$^v$ IV. In this \textit{clausula}, the tenor melody begins on the second note of the chant melisma; it also appears to omit two pitches of the melisma ($a$, $b$ flat each time) as compared to chant sources of the melody – a fairly common feature of \textit{clausula} tenors, as Rankin has noted.\footnote{Ibid., 127.} Example 2.23a presents this tenor against the appearance of this melody in the missal BnF Lat. 1112 with differences highlighted in red.

\textbf{Example 2.23a} The \textit{LATUS} melisma in $F$ fol. 158$^v$ IV and BnF Lat. 1112 fol. 105$^v$
The specific recension of the melisma used in this clausula appears to present a clear opportunity to draw out repetitive elements of the chant. As Example 2.23b illustrates, the tenor has been arranged in a second mode rhythmic pattern comprised of units of three notes followed by two. And this arrangement results in a tenor structure that articulates a newly discernible melodic repetition in the first part of the melisma: the first ten notes of the tenor (A) can now be heard directly repeated as the second (A'). This structure becomes all the more significant in consideration of the melodic manipulation of the tenor. The singer’s decision to begin the setting on the second note of the melisma, as well as to make use of two repeated notes (shown at x) rather than three, as preserved in plainchant sources, makes a case for the deliberate manipulation of the chant melody in order to bring this melodic idea to the fore – a re-imagining of the original plainchant melody in this rhythmically measured context.

A further clausula on the LATUS melisma (setting only the syllable ‘LA-’) draws attention to another potential repetition in the melody, but does so by beginning not on the
second note, but the third note of the chant – a d. What seems to link the two settings, however, is their shared desire to emphasise melodic repetitions inherent to the underlying chant. Indeed, the clausula on F fol. 184r III, shown in Example 2.24, selects a rhythmic design that explicitly highlights a quite different recurring feature of the melisma. While its tenor is not organised according to a repetitive rhythmic pattern, an underlying periodic design arranges phrases of the chant in an antecedent-consequent relationship: four-note units always begin the two-phrase structure followed by a longer phrase of between six and eight notes. It is these initial four-note phrases that contain the repeating melodic material. The first phrase of the clausula, shown in the example at A, is exactly repeated as the third, A’, while the fifth and seventh phrases (B and B’) are almost identical.

Not only the rhythmic arrangement but the melodic content of the tenor speaks to singers’ deliberate accentuation of melodic repetitions of the chant in this clausula. Such a point is perhaps most readily identifiable in the first half of the setting where the decision to vary the number of notes in some tenor phrases seems to have directly facilitated the initial A–A’, and B–B’ repetitions. The second tenor phrase of the clausula, for example, can be seen to close with three repeated b flats followed by a two-note linking figure, thus setting up the return to d in the third phrase (in turn, enabling the repetition between A and A’). The tenor phrase that comes after A’, however, breaks immediately after the note repetitions on b flat. The reason for this change in phrase length seems to be structurally motivated – finishing the fourth tenor phrase after the repeated b flats serves to clearly mark an end to the first part of the melody – but in so doing, it also sets up the second melodic pattern (B and B’) that now begins on a g.

The clausula thus presents a somewhat flexible but nonetheless pronounced articulation of a melodic repetition inherent to the chant. Moreover, it appears that this compositional design also impacted upon the melodic content of the duplum voice, where repetition becomes a distinguishing quality of its material as well. In particular, the melodic figure first heard at a is nearly exactly repeated at a’ (especially the ending gesture d-d-c), and the opening of the phrase marked b is stated note-for-note at b’, where the same underlying tenor material is heard a second time. Importantly, this habit of repetition in the duplum appears expressly driven by the repetitive structure of the tenor. It would seem that the organisation of the chant in this clausula presented an opportunity for a reciprocal design in the duplum voice.
Together, the two clausula settings illustrate contrasting ways of articulating melodic repetitions inherent in the chant melisma. Both show a pronounced interest in experimenting with melodic repetitions in their tenor designs, and seek to work out the compositional implications of these arrangements in their upper voices as they do so. But the decision to begin tenor settings at different points in the chant resulted in recensions of the melisma with quite contrasting melodic characteristics. These alternative starting points, in turn, gave rise to clausula tenors that offered different opportunities for melodic repetition that fundamentally alter the way the chant melody is to be heard. The two settings therefore seem to present a very clear instance in which singers were not only actively interested in the underlying properties of the chant, but that they were also able to reshape the specific version of that chant in order to accomplish such compositional designs.
It is not only the case that singers were interested in melodic repetitions of chant melismas as they formulated their *clausula* tenors; many other properties of pre-existent melodies seem also to have captured their attentions in this compositional process. Testing out this idea, my final example considers an instance where the repetition of individual notes of the chant appears to become the principal motivation behind the *clausula* tenor’s rhythmic design. Indeed, such instances of compositional engagement with the melisma are of special interest since they bear witness to new ways (beyond repetitive chant structures) that singers conceived of their plainchant melodies. They also add further nuance to an argument about the compositional process of setting a chant melody as a polyphonic tenor and the musical possibilities presented by this strategy of tenor design.

One *clausula* that seems especially interesting in this regard is a setting of the now familiar Christmas Day Gradual *Viderunt omnes*, upon the text DOMINUS. Example 2.25 presents a transcription of the *clausula* as it is copied on fol. 149v VI of F. Unlike many other DOMINUS settings, this *clausula* does not employ a consistent rhythmic pattern, but rather, arranges the tenor into phrases of varying length, assigning the value of a long to each individual note. Such an organisational strategy gives rise to a notably flexible phrase structure in both voices – at first glance, it would seem that this *clausula* is less concerned with the type of periodic repetition traceable in previous examples. Yet under closer inspection, it appears that the rhythmic arrangement has been chosen to draw attention to another recurring feature of the chant.

In fact, the rhythmic arrangement of the tenor of this *clausula* perfectly suits the two principal musical ideas of the setting. The first of these, characterising the first part of the *clausula*, is centred around the insistent repetition of certain pitches of the chant. The manner in which such emphasis is achieved is striking. This is because every tenor phrase in the first part of the setting has been devised so that *ordines* consistently begin on a *d* (highlighted in red). They have also been arranged in such a way that the final note of every phrase is a recurring *c* (boxed in the example). All the more significantly, the number of notes contained within each *ordo* changes from phrase to phrase in order to achieve this musical design: the

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123 See my early discussion of the DOMINUS melisma at 90–111. For a comparison of all DOMINUS *clausulae* see Appendix 2.
opening five tenor phrases vary in length, with the first, third, and fourth *ordines* each containing five notes, while the second and fifth contain four notes. In other words, the portioning up of this melisma into smaller melodic units seems to have been directly influenced by the successive pitch repetitions of the first part of the melody. The duplum voice intensifies the interest in repeated *c*s that underlies the tenor design even further. This upper voice consistently reflects the phrase structure established by the tenor so that each
tenor unit is marked by a simultaneous break in the duplum. In addition, the final note of each duplum phrase – taking the value of a long – arrives on a c at every occurrence, the unison consonance between parts thus highlighting this repetition as a defining aspect of the setting.

The second part of the clausula is structured according to a similarly repetitive organisational scheme. In particular, the melodic figure introduced at A in the example – following the end of the repetitions on c – comes to be exploited throughout the remaining passage. The result of this sustained reuse is a shift in tonal focus in this part of the setting. Based around an f, the constant repetition of this figure can be heard in part as a melodic response to the accentuation of c that characterises the first part of the clausula. Indeed, in every phrase, the pattern ‘f down to c’ is repeated almost note for note: at B, for instance, it is shifted to the middle of the phrase, and at C, it is enlarged to form a longer phrase against eight tenor notes. This new emphasis around f also corresponds to a much greater melodic flexibility in the tenor melody, with a greater range – compassing an octave from low to high f – against which the duplum idea is worked out.

The central idea of this clausula, therefore, seems to be in the exploration of two tonal areas that are drawn out of the underlying chant melody, and that play out in the different voices and sections of the setting – an interplay between c and f that has its root in the melodic profile of the fifth-mode chant melody. What is significant in this setting is that not only structural features of the pre-existent melody have come to be integrated into the clausula tenor, but tonal features as well; moreover, this aspect of compositional design has come to directly impact on the melodic ideas of the duplum voice. In this deep compositional engagement with the chant and its underlying properties, therefore, one finds a wholly different way of interpreting a melisma that offered singers further opportunities to newly articulate these melodies.

The apparent fascination with emphasising musical features of a chant testified to by these clausulae is a compositional behaviour, I suggest, that is best read against the wider motivation of singers to search out different ways of handling a chant melody in measured polyphony. A desire to accentuate structural features of a chant, to draw out melodic figures, and even to exploit individual note repetitions within a setting, suggests that singers actively sought to experiment with inherent properties of chant, and to recast them in a rhythmically measured context. Evidence of this compositional technique in turn might be seen to offer a rare glimpse into some of the ways thirteenth-century singers heard and remembered chant – evidence of otherwise elusive possibilities for performance. For the specific polyphonic
designs chosen by singers not only serve to indicate some of the underlying melodic features of chant that were well known to them, but also illuminate those viewed as important enough to draw attention to in a clausula tenor. These compositional strategies also serve to expose the broad range of perspectives from which singers viewed their materials. Significantly, in seeking to articulate a feature of chant in a clausula tenor, it is clear that singers carefully selected appropriate rhythmic designs in order to divide up a melisma in a specific way; but they were also able to actively adapt elements of the chant melody in order to exhibit a particular structural property. That creators of clausulae can be seen to manipulate chant melismas in this way in turn highlights a new engagement with these liturgical melodies, one that draws upon many of the defining musical features of chants on the one hand, while on the other, recognises the possibility to adapt the chant for its new rhythmically measured context.

The analysis of three clausula case studies has thus sought to illustrate the very different ways that singers handled their pre-existing chant materials. Far from a simple reflection of inherent properties of a chant in discant, it would appear that efforts to articulate these features in clausula tenors were not always straightforward. Rather, they often required a high degree of flexibility in the treatment of the chant in order to achieve a particular musical design. The examples presented above have served to remind us that, in many instances, chant melismas had their own – often highly distinguishable – melodic features that singers drew upon. But as these melodies were set as polyphonic tenors, singers were also able to furnish the chant with additional layers of melodic interest, giving voice to melodic qualities that are less immediately discernible in a monophonic context, or that are given new prominence as a clausula tenor. Such an approach to tenor composition can also be seen to impact the design of a setting on a number of additional levels – from phrase structure, tonal emphasis, and perhaps most significantly, duplum design – which often serve to heighten the melodic properties of the chant that are being drawn out in the tenor voice. This treatment of chant materials at its core, then, points towards an imaginative engagement between old and new – between the pre-existent liturgical melodies already known to singers, and the new musical possibilities presented by clausula composition.
Experimentation with ways of handling a chant melisma and its underlying melodic properties might now be viewed as central to the compositional process of creating a clausula tenor. Certainly, surviving manuscript collections point towards a myriad of compositional approaches guiding the work of singers, and an ‘unprecedented liberty’ in the organisation of a chant in this polyphonic context. Arguing for a heightened awareness of the properties of these underlying materials, we have seen how singers engaged with chant melismas in ways that repeatedly provoked new polyphonic opportunities for creating a clausula. Necessarily, the emphasis of my analytical approach thus far has been on uncovering and explaining the relationship discernible between pre-existent chant melodies and clausula tenors. For as I have suggested, coming to know how these melodies were remembered and shared in monophonic practice throws new light onto their use as the foundation of polyphonic clausulae. Taking this work further, the final part of this chapter begins from an altogether different position. In what follows, I now wish to investigate the level of distance that can be found between the treatment of chant in monophonic contexts as compared to clausula tenors. What, I come to ask, are the polyphonic designs that lie at the extremes of this compositional practice? And what might this have to say about the ways that singers thought about their clausula tenors in relation to chant practices?

The premise at the heart of this line of questioning is based around singers’ conceptions of the chant melodies they set as clausula tenors. For while I have argued that creators of clausulae knew and employed ways of organising their chant materials that resonated closely with monophonic traditions of chant performance, it is also the case that the broad range of compositional techniques developed by singers provided considerable scope for experimentation beyond those traditions. To a growing extent, it seems, a chant melisma came to be viewed in expressly musical terms, as melodic material with which singers may experiment, and therefore handled with a greater degree of creative freedom. Thus, while a singer’s knowledge of specific chants, as well as an understanding of the melodic language of the chant repertory, still remains the conceptual starting point for making a clausula, it would also appear that a shift in the treatment of chant can be traced across clausula settings, where knowledge of a chant melisma and its constituent features may not always come to be

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124 On this idea, see Smith, ‘The Clausulae of the Notre Dame School’, 56.
reflected in its arrangement as a clausula tenor. This in turn begins to indicate a far freer compositional engagement with liturgical melodies in some clausulae, and argues for a more complex – and conceivably, a more abstract – relationship between chant and polyphonic tenor.

One measure of this compositional freedom, indicative of an increasing conceptual distance between monophonic and polyphonic practice, might lie in those clausulae that do not simply state the tenor melody once, but repeat statements of the chant multiple times. For these pieces bear witness to a strategy for composition motivated by primarily musical considerations, since multiple repetitions of tenor melodies are not necessitated by liturgical function. Serving as an excellent starting point for my analysis, therefore, one particularly rich source of such clausulae can be found in the fifth fascicle of F, which contains 129 settings with at least two repetitions of their tenor melisma – more than a quarter of the total clausulae in this part of the book. As Norman Smith has argued compellingly, in some cases, this tenor repetition can be explained simply as the combinatorial process of copying two pre-existent settings together as a multiple-statement clausula. But in other instances, tenor repetition appears to have been fundamental to the original conception of the setting. And in these settings, the repetition of the tenor melisma (sometimes, even, set to a different rhythmic pattern) can be seen to present new opportunities for clausula design, giving rise to a broad spectrum of compositional techniques that singers could explore within just a single piece.

Chief among these techniques was the possibility for clausula tenors to separate melodic features of the underlying chant melody from the recurring rhythmic pattern used within a setting. Indeed, the use of this particular compositional strategy might be seen to illustrate, in an especially clear way, an instance where singers were able to uncouple a chant melisma from its monophonic context, since the disalignment of melodic and rhythmic elements presents a situation where singers would have treated the tenor less as a chant melody with its own internal structures, and much more as a series of pitches upon which a rhythmic scheme is imposed. Such a technique in turn raises a number of questions concerning the compositional processes underpinning clausula settings based on multiple

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125 This is point also intimated by Catherine Bradley, who has sought to demonstrate that polyphonic settings may not always exhibit a concern for faithfully adhering to monophonic versions of chant. On this, see Polyphony in Medieval Paris, 15–30.

tenor repetitions. Most apparently, it invites investigation into the specific treatment of chant melodies when formulating a tenor of this sort. It also calls for an analysis of the compositional implications of such tenor designs, particularly for the duplum voice. Responding to these questions in what follows, the final part of the chapter offers two examples of clausulae that appear to treat their chant melismas in notably ‘abstract’ ways – in a manner quite distinct from a monophonic context. It seeks to argue that creators of clausulae sometimes devised tenors that handle the chant as a series of pitches that can be reformulated in compositionally distinctive ways by means of their rhythmic arrangement. It also presents further evidence of the flexible treatment of chant melodies, and in so doing, it serves to demonstrate how these musical materials may be handled in a new – more overtly compositional – aesthetic light.

BEYOND LITURGICAL FUNCTION

To understand the extent to which a clausula tenor may be set apart from monophonic practices of chant singing, and to examine the compositional process that led to such a design, I will first examine a two-part setting of the Easter Day Gradual Hec dies. This clausula, based on the very opening of the chant, for the words HEC DIES, is copied in F, on fol. 155r V: it is an unicum, though it is one of nine settings of this portion of the chant documented in surviving manuscripts.127 It is a clausula that makes an excellent specimen from which to demonstrate the new ways a chant melisma may be handled, most especially because the melodic contrast between its multiple tenor statements presents a case for a much less liturgical, and more musically artistic conception of the chant in this polyphonic context than many of the previous examples discussed in this chapter.

Example 2.26  

HEC DIES melisma, BnF Lat. 1112, fol. 105v

127 For a list of witnesses and concordances, see van der Werf, Integrated Directory, 29–30.
The passage of this second-mode chant melody based on the words HEC DIES is typically eighteen notes in length. Example 2.26 presents a version found in the Parisian missal BnF Lat. 1112. The profile of the melisma is quite simple: the syllable change from ‘hec’ to ‘di-’ marks a central point in melody. The first nine notes ultimately outline a move up to c, with particular emphasis around an a, the final of the chant, while the second part does the opposite, moving back from c to a. What seems to be a somewhat quotidian melisma, however, comes to receive particularly striking reformulation in the HEC DIES clausula, where its structure seems to have been played with in an eminently compositional sense. In this clausula tenor, the melisma is, in essence, repeated three times. My transcription, at Example 2.27, aligns each statement of the tenor for ease of comparison.\textsuperscript{128}

\textbf{Example 2.27 } HEC DIES clausula tenor, F fol. 155\textsuperscript{r} V

The first statement of the tenor can be seen to handle the melisma in a manner relatively faithful – at least in terms of pitch content – to the plainchant source. Although the final note of the melisma is spared until the very end of the clausula, and one can also observe a difference in the number of repeated cs between the melisma in BnF Lat. 1112 and the tenor (the clausula contains three cs compared the chant witness’s four), the two appear closely concordant. In the first tenor statement, these sixteen notes of the chant are set to a rhythmic pattern formed of two units: a double long-long pattern, followed by a three-note unit set in longs. Thus, the melody is portioned up into five-note segments with a final note

\textsuperscript{128} A transcription of this tenor, and indeed, the upper part, based upon other rhythmic modes may well be possible, though a reading in mode one seems most plausible, especially on account of the penultimate phrase of the duplum.
introducing the start of the rhythmic pattern once more. Interestingly, this results in the disalignment of rhythmic and melodic elements of the tenor so that the beginning of the second statement begins in the middle of the rhythmic pattern. The most obvious result of this arrangement is that a different recension of the chant becomes available at each new tenor statement, enabling singers to work out a different duplum design over the course of each repetition. But this rhythmic design also begins to demonstrate something about the way the chant melody was viewed in the process of composition – that the chant melody may be detached from the tenor rhythmic pattern already suggests a somewhat abstract conception of the melisma. The implication is that singers were able to think about, and therefore engage with this melody in ways that were clearly distinct from its circulation in monophonic contexts.

The second and third statements of the tenor depart more radically from the melodic profile of the pre-existent chant melisma. Specifically, both of these repetitions of the chant can be seen to differ not only from the first tenor statement, but also from each other. It is clear, however, that all three statements belong together as one composed unit rather than as the combination of previously existing settings, not least because of the dis-alignment of the rhythmic pattern. Boxed in the example, the second statement introduces the first change to the melisma. One note shorter than the opening tenor statement, this second repetition includes an additional c midway through the melisma while omitting an a and g at the end so that it is now comprised of fifteen notes. The third statement takes this abbreviation even further, omitting six additional notes of the melisma. This final tenor statement, as a result, is comprised of only the initial eight notes of the chant, cutting the chant short just before its repeated cs and jumping directly to the final a of ‘di-es’. In these further tenor statements, therefore, we find several layers of compositional abstraction from the chant’s original monophonic context. First, over the course of the setting, the tenor experiments with the dis-alignment of rhythmic and melodic components. But in addition, and more remarkably, it seems that this chant melody invited singers to edit the pitch content of the melisma in an extreme way, where every restatement of the melisma is a different length.

What of the implications of this manipulation? It would seem that the duplum voice of this clausula – transcribed in Example 2.28 – is concerned with exploring the compositional possibilities presented by the manipulation of this melisma in a quite focussed

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129 The similarity of melodic ideas in the duplum voice found across all three tenor statements also seems to support this view.
way. For one, its melodic material is based around a limited set of ideas characterised by repetitive scalar movement. The duplum melody is also orientated around an e for much of the setting, with neighbouring notes introduced both above and below – rarely, however, does the melody pass beyond a third away from this central pitch. Significantly, this melodic material – and its tonal focus – appears to be directed by notions of consonance suggested by the tenor. In all but two instances, for example, duplum phrases begin on an e, aligning consistently with the a sounding in the chant melisma. The two exceptions, boxed in the example, begin at the unison with the tenor, on the c that occurs midway through the chant melisma.

Example 2.28  HEC DIES, F fol. 155v V

The duplum voice also betrays a flexibility in its phrase structure that enables its material to be tailored to the changing melodic features of the tenor from statement to statement. The first two phrases of the duplum (x and y), in this regard, correspond in length to the tenor design so that rests in the upper voice are marked by a simultaneous break in the tenor. Other phrases, however, are significantly longer: over the third tenor statement, the duplum is constituted of a single extended phrase that spans the value of eleven longs (at z).
But what seems to connect these different explorations of melodic material is a fundamental awareness of the structure of the tenor voice. In particular, we find that the beginning of the duplum phrase consistently aligns itself with the beginning of each tenor statement (marked by roman numerals in the example) – and does so by stating the same harmonic interval of a fifth at each repetition.

This marking out of repetitions in the tenor structure in the duplum suggests a high level of co-ordination between voices, and by implication, it connotes a degree of pre-planning in the process of composition in this clausula. That the extreme manipulation of the chant is not only acknowledged but emphasised through the periodic design of the duplum argues for singers’ sophisticated engagement with chant materials in both voices. Furthermore, this notion of stylised design in both parts advocates for a musical situation that has far less basis in liturgical function, pointing instead to a qualitatively artistic basis for composition. The tenor’s treatment of the chant might thus be viewed in quite abstract terms – less concerned with a faithful representation of the melisma – suggesting that singers were thinking in very imaginative ways about the possibilities for compositional design in their clausulae.

**Separating Melodic and Rhythmic Patterns**

I have suggested that one effective indication of a chant melisma being treated in more abstract terms might be found in the displacement of melodic and rhythmic components within a clausula tenor. My next example now seeks to examine this technique in closer detail in order to understand the compositional implications of such a tenor design on the clausula’s overall musical form. For this, I turn to a clausula on the melisma DONEC VENIAM, copied on fol. 152’ III of F, from the Gradual for St John the Evangelist, Exit sermo (M5).

Clausulae that separate melodic repetitions of the chant and the tenor’s rhythmic arrangement, it is to be noted, are not especially unusual across surviving sources. Of the 129 settings in F’s fifth fascicle that have more than one tenor statement, only fifty-eight align melodic and rhythmic components at repetitions, while fifteen present different rhythmic patterns for each tenor statement. The remainder present some form of rhythmic or melodic dis-alignment in their tenor repetitions. The process by which this is achieved, as one might
expect, is remarkably varied. Most typically, some form of manipulation, either in the chant material or the rhythmic pattern being used, is needed in order to realise such a design. However, in some cases, it seems that clausulae require very little compositional engineering to make their displacement of the rhythmic pattern against the chant melody work.

Such clausulae might thus be regarded as of special compositional interest in an argument for the more abstract treatment of chant. I am not, however, the first to draw attention to them. In particular, Norman Smith’s essay ‘Tenor Repetition in the Notre Dame Organa’ offers an excellent first survey of this phenomenon, and of the process of tenor repetition across the repertory more broadly. Though framed within a general chronological narrative, positioning clausulae with tenor repetitions as likely to be composed later than single statement settings, and examples of melodic-rhythmic dis-alignment read as a later stage still of this chronology, his analyses begin the task of examining the extent of this practice. And even if the implications of analysis remain to be fully explored, Smith’s work usefully clarifies the scope of this compositional device across surviving collections. Wulf Arlt’s analysis of a clausula based on four repetitions of a chant melisma takes this further. Here, as I have suggested previously, Arlt makes the case for a ‘systematic play’ with the chant material based on the exploration of new compositional procedures in both voices, suggesting that such clausulae mark a decisive step in the formulation of chant into polyphony. Yet there remains more to be said about this strategy for devising clausula tenors and what it may reveal about the compositional process underlying these settings. This, in part, is the purpose of the analysis that follows. But my emphasis also builds on previous scholarship because it looks not only at the specific techniques for devising such a tenor, but also what this says about singers’ engagement with pre-existent liturgical melodies, and the levels of distance between these two conceptions of chant.

The DONEC VENIAM clausula in question, might, for several reasons, be viewed as exceptional. First, it is an unicum, found only in F; it is also copied at a point in the fifth fascicle where the liturgical ordering of clausulae is disrupted. This organisational discrepancy, one of many observable in the fifth fascicle of F, is of particular interest because it would appear to indicate that this DONEC VENIAM clausula was part of a separate copying
effort undertaken by the scribe, perhaps drawn from a different exemplar as compared to the other polyphonic settings upon this chant. This specific divergence in liturgical ordering centres around a series of eleven clausulae based on gradual chants for St Stephen (Sederunt principes) and St John the Evangelist (Exiit sermo) set out in Table 2.5. As is to be expected, the first group of settings, clausulae 40–6, are ordered according to their position within the liturgical calendar: five MANERE clausulae for use on 27 December follow two upon [DOMI]NE, for 26 December. But the clausulae that immediately follow – nos. 47–50 – can be seen to diverge from this liturgical plan. Two more settings of [DOMI]NE, from Sederunt principes, have been copied at this point, followed by two further clausulae upon the Exiit sermo chant, including the DONEC VENIAM setting.

Table 2.5  Ordering of M3 and M5 clausulae in the first ordered series of the fifth fascicle, MS F

<table>
<thead>
<tr>
<th>Clausula No.</th>
<th>Folio &amp; System</th>
<th>Ludwig No.</th>
<th>Text</th>
<th>Feast</th>
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<tbody>
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<td>40</td>
<td>151r II</td>
<td>M3</td>
<td>[DOMI]NE</td>
<td>St. Stephen, 26th Dec., Gradual</td>
</tr>
<tr>
<td>41</td>
<td>151r III</td>
<td>M3</td>
<td>[DOMI]NE</td>
<td></td>
</tr>
<tr>
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<td>151r IV</td>
<td>M5</td>
<td>MANERE</td>
<td>St. John the Evangelist, 27th Dec., Gradual</td>
</tr>
<tr>
<td>43</td>
<td>151r V</td>
<td>M5</td>
<td>MANERE</td>
<td></td>
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<tr>
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<td>151r VI</td>
<td>M5</td>
<td>MANERE</td>
<td></td>
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<td>151r III</td>
<td>M5</td>
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<td>M3</td>
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<td>152r I</td>
<td>M3</td>
<td>[DOMI]NE</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>152r II</td>
<td>M5</td>
<td>MANERE</td>
<td>St. John the Evangelist, 27th Dec., Gradual</td>
</tr>
<tr>
<td>50</td>
<td>152r III</td>
<td>M5</td>
<td>DONEC VENIAM</td>
<td></td>
</tr>
</tbody>
</table>

One explanation of this discrepancy, of course, may be that the scribe was copying from material that itself was not liturgically ordered. Yet far from an isolated issue, one finds a similar phenomenon of clausulae copied in the wrong liturgical position within a cycle across all four ordered sections of the clausula fascicle of F. The extent of this ‘mis-ordering’ suggests that this was more than an occasional problem for the scribe – one that cannot be fully accounted for as the result of copying from material that, itself, was not in liturgical order. Rather, a seemingly more convincing explanation is that the scribe was working from

132 Interestingly, clausulae 41 and 46 appear to be transcribed motets; see Fred Büttner, ‘Weltliche Einflüsse in der Notre-Dame-Musik? Überlegungen zu einer Klausel im Codex F’, Anuario Musical 57 (2002), 19–37 and ch. 4 of Bradley, Polyphony in Medieval Paris. This observation resonates with Bradley’s proposition that the scribe of F usually made motet transcriptions from French motet exemplars and turned to these exemplars at the end of tenor groups (Polyphony in Medieval Paris, 118–19).
more than one set of materials as he copied, organising them within his book as he went. In other words, it appears that the scribe’s decision to stray from the organisation scheme of the series as he copied this collection of pieces was motivated by a desire to include additional polyphonic settings of these melodies in close proximity to the earlier _clausulae_ upon the same chant. The break in liturgical order of pieces speaks to a certain hierarchy of organisational schemes at this point in the fascicle: the scribe deemed it more important to copy two further _Exit sermo clausulae_ (including the _DONEC VENIAM_ setting) here than to preserve a rigid liturgical plan across the fascicle – a choice of musical comprehensiveness over consistency in liturgical ordering.

In a compositional sense too, the _clausula_ is striking, for its tenor is formed of an unusually high number of repetitions the chant melisma – five in total. In fact, only one surviving _clausula_, on the _OMNES_ melisma (F fol. 149r II), from the Gradual _Viderunt omnes_, has more repetitions in its tenor. Further, and perhaps most immediately discernible, the _clausula_ also presents a particularly thorny notational situation, where the rhythmic interpretation of ligatures, especially in the duplum, is quite challenging. The frequent occurrence of _fractio modi_ and _coniunctura_ figures often obscure the determination of any modal pattern. Indeed, this led Rebecca Baltzer to remark that the notation of this _clausula_ is ‘so erratic and unpredictable that it almost completely defies transcription’. For these reasons, and in particular the orthographical issues of notation, it has been suggested by several scholars that the setting may in fact be derived from a motet and copied into F as an untexted _clausula_. Yet for this _clausula_, no known source motet survives; moreover, its _purum_ ending seems to suggest its suitability within an _organum_ context.

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133 This _clausula_ may perhaps be a transcribed motet; see the motet _En mon chant deslou un jeu qui molt est loez/OMNES_ in MüA, fol. 1.

134 Baltzer, ‘Notation, Rhythm, and Style’, 284, no. 1. Baltzer’s comments seem entirely justified: my transcription takes as its guiding principle notions of consonance and phrase structure (alongside interpretations of ligature groupings), though in many cases, the rhythmic reading still seems somewhat problematic.

135 See, for instance, Waite, _The Rhythm of Twelfth-Century Polyphony_, 100.
The melisma on which the *clausula* tenor is based is nineteen notes in length – its five statements are presented in a transcription of the *clausula* in Example 2.29. This nineteen-note melody is divided up in the setting into five-note units and set to a recurring rhythmic pattern, probably in the first mode. The result of this portioning up of the melisma is a tenor whose melodic and rhythmic elements first dis-align and, over the course of the five repetitions, slowly move back into synchrony. Specifically, each statement of the tenor melody can be seen to shift by one note against the rhythmic pattern so that the beginning of the second tenor statement aligns with the fifth note of the pattern; the third statement with the fourth note of the pattern, and so on. Put another way, the five-note pattern of this *clausula* has been devised in such a way that each unit of the rhythmic pattern (working from back to front) comes to introduce a new statement of the chant melody. The result of this rhythmic arrangement is the creation of a perfectly symmetrical tenor design underlying the *clausula*, first discerned by Norman Smith and presented Example 2.30.¹³⁶

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This level of complexity in the structure of this clausula points to a carefully worked-out, almost mathematical formulation of the chant.\footnote{Perhaps another example of this kind of compositional ‘working out’ can be found in the clausula NUSMIDO ($F$, fol. 150v III), whose melisma is in retrograde.} Resonating closely with what Wulf Arlt has described as the systematic exploration of musical possibilities, this setting is based on a compositional structure principally concerned with the phasing out (and ultimately, phasing back in) of rhythmic and melodic elements, and thus, the experimentation of these two compositional elements in a very deliberate way.\footnote{Arlt, ‘Warum nur viermal?’, 43.} By foregoing any prior notion of melodic groupings of the melisma – setting aside any of the chant’s underlying melodic features – the tenor design here demonstrates a conception of the DONEC VENIAM melody to be understood in fundamentally musical terms, as a series of pitches to be arranged and worked into a methodical structure. As such, it can be seen to handle the melisma in a manner quite distinct from ways of singing chant familiar to monophonic contexts. Singers’ engagement with this chant melody thus appears remarkably abstract – this highly unusual clausula in turn stands as a pronounced witness to the new kinds of vocabularies of chant that have been made available within this rhythmically measured situation.
7. CONCLUSIONS: FROM CHANT TO POLYPHONIC TENOR – A SPECTRUM OF POSSIBILITIES

At its root, this chapter has sought to argue that the process of composing a clausula tenor was inherently linked to the daily practice of singing chant. It has suggested that creators of clausulae would have been intimately familiar with the chant melodies they set in polyphony and a knowledge of how these chants went would have been deeply ingrained in their memories. Moreover, it has attempted to demonstrate that this sounding memory of chant constituted the basis for formulating a clausula tenor, with singers seeking to experiment and play with conceptions of these melodies at almost every turn. The process of composing a clausula tenor might therefore be viewed on a foundational level as an extension of practices of singing chant that were so well known to twelfth- and thirteenth-century Parisian musicians.

In support of such a view, it appears that singers were clearly interested in the musical properties of their underlying plainchant and set about exploring these features in order to give new voice to these melodies in a rhythmically measured context. At the same time, alongside this continuous engagement with the chant, it is also possible to chart a new kind of approach to tenor design that seems less concerned with the articulation of a chant’s underlying melodic characteristics and more to do with a purely artistic, compositional attitude towards this musical material. Crucially, this mediation between liturgical function and compositional freedom seems to have provided considerable scope for musical experimentation beyond monophonic chant traditions. In consequence, the surviving repertory of clausulae can be seen to present a remarkable range of ways to treat chant melodies in rhythmic measure that evidence contrasting levels of distance from practices of singing chant – a spectrum of possibilities, from those that exhibit a close affinity to monophonic practice to others that can be categorised to suggest greater levels of abstraction.

At one end of this spectrum, singers evidently found inspiration in many of the inherent musical features of their chant materials. Most striking in this regard is the finding that the division of chant melodies into smaller melodic units came to be features that singers replicated in the formulation of some clausula tenors. The mosaic-like structure of these solo chants, I have argued, would have been at the forefront of the minds of singers in the process of composition – structures that can also be traced through the notational orthographies of
scribes in chant books. And this memory of how the chant goes, based on a common melodic vocabulary of chant singing evidently informed the rendering of these melodies into rhythmic measure in a very pronounced way. Indeed, in some cases, I have demonstrated that groupings of notes in a clausula’s tenor correspond more or less exactly with the melodic divisions traceable within monophonic chant traditions. The conclusion to be drawn from this type of engagement with chant melodies is an acknowledgement of the central position chant practices have in the formulation of clausula tenor designs, illustrating a much more interconnected relationship between chant and polyphonic tenor than has been previously acknowledged.

It has also been possible to observe very similar attitudes to the treatment of chant in monophonic and polyphonic contexts in other aspects of tenor composition. One further example might be found in the types of melodic variation traceable across chant books and clausula tenors. For a number of analogous forms of variant, as well as specific areas of variation, can be identified across these two practices of chant singing, suggesting a degree of similarity in the conception of materials. That said, the scale of melodic variation evidenced across clausulae on the DOMINUS melisma has sought to build a case for a high level of variation in the treatment of chant being set as clausula tenors, well beyond that evidenced in practices of singing chant. In this ‘family’ of DOMINUS clausulae, it would seem that singers drew upon their awareness of the forms and locations of melodic variants among chant traditions, exploiting this potential for variation as a means to adapt tenor melodies for compositional ends. The cultivation of melodic difference among this clausula family has, in turn, uncovered a practice of deliberate manipulation of chant when creating a clausula. One of the principal aims of this process of manipulation, I propose, was the experimentation with different ways of formulating a clausula tenor, and by implication, to explore the myriad of compositional possibilities presented by subtly different recensions of chant materials.

A further thread through this chapter has been to examine some of the ways that singers set about articulating and amplifying properties of chants through the arrangement of pitches in tenor ordines. This is because, in the process of tenor composition, it seems singers were not only acutely aware of the internal structures, melodic repetitions, and other underlying properties of chant melodies; they also actively sought to call attention to these features in rhythmic measure. My analysis, in turn, has sought to expose a number of specific

139 See above at 65–81. Tables of melodic formulae common to some of these chants, including the fifth-mode graduals discussed above, can be found in Apel, Gregorian Chant, 345–50.
compositional techniques used by singers to engage with their chant materials in new and creative ways. But at the same time, in this process of tenor design, my work has shown that the direct translation of chant into rhythmic measure would not always have resulted in underlying features of chant being represented in the clearest light. An extension of this strategy for clausula tenor composition, I therefore suggest, was that chant melodies often required a degree of adaptation in order to achieve a particular compositional design. Together, these compositional processes offer further insight into the ways singers handled their chant materials, not least because the decision to represent certain properties of a chant in this overt way must have represented a very deliberate choice on the part of its creators. One conclusion to be drawn here, therefore, is that singers approached the process of tenor composition in highly flexible way, attuning at once to a range of underlying melodic features presented to them by their chant heritage, while at the same time, playing with and reformulating this material in a wide variety of forms.

At the other end of this spectrum, the final two clausula examples presented above (HEC DIES and DONEC VENIAM) have illustrated a more complex relationship between monophonic and polyphonic practices of singing chant that offer another frame of reference for tenor composition. This is because, in both cases, these settings can be seen to betray a new level of distance from the original chant melodies as a result of their melodic and rhythmic design. The significant conceptual change in the way chant materials are handled by singers in these clausulae argues for a level of abstraction in their treatment born out of their organisation into rhythmic measure. In the case of HEC DIES, where each of the three statements of the tenor setting exhibits a different (and gradually contracting) form of the melody, one is presented with a rendition of the chant that is significantly different to a typical performance of this material in a monophonic context. Similarly, DONEC VENIAM reveals a situation where the rhythmic design of the tenor has been worked out to an extreme degree so that restatements of the chant melody shift out of synchronisation before slowly working their way back into alignment by the end of the setting. This level of compositional ingenuity, in turn, offers a pronounced reflection of how singers handled chant melodies in a way that appears fundamentally distinct from chant practices, for it signifies a shift in the way a chant melody is perceived by creators of clausulae. Clearly this was material that, in some cases, could be drawn upon in ways that seem very closely related to monophonic performance traditions; importantly, however, singers were also able to view this material in a much more abstract manner, as a series of pitches that could be arranged into compositional designs that have very little to do with the liturgical situation from which the chant was taken.
To be sure, the reasons for deciding upon one of the range of compositional procedures discussed here were surely numerous. Yet without doubt, this continuum of possibilities for fashioning a *clausula* tenor captured the imaginations of singers, affording the potential for significant compositional scope in this liturgical context.
1. ANALYTICAL MODELS, SCHOLARLY DEBATES

Although the study of compositional processes underlying the creation of the *clausula* repertory constitutes an emerging aspect of scholarship, to date no work examining in detail the techniques for devising a *clausula*’s duplum voice has been published. Analytical questions directed towards the compositional design of these upper voices have largely remained beyond the scope of scholarly discussion, and few writers have sought to understand exactly how melodic ideas were formulated by singers in the moment of creation.\(^1\) Less still has been done to trace these melodic ideas and examine their use across the repertory, or to investigate how these ideas could be set against chant melodies. Such issues, dealing with acts of musical creation, however, are of central concern for this chapter, not only for what they may reveal about the process of making the upper voices of *clausulae*, but also for what they can uncover about the habits and motivations of singers that currently lie hidden beneath the surviving records of this practice.

The first foundations for this work were laid decades ago, around the late 1960s and early 70s, by scholars interested in questions of style and compositional development in the *clausula* repertory: their work was among the first to call attention to the ways duplum voices appeared to experiment with their melodic materials, often by means of specific compositional devices. Rebecca Baltzer’s 1974 dissertation, for example, offered an extensive survey of *clausula* collections that enabled her to remark upon aspects of compositional design seemingly concerned with the testing out of particular melodic ideas.\(^2\)

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1 Exceptions that can be noted here do not deal explicitly with the *clausula* repertory. See, for instance, Guillaume Gross, *Chanter en polyphonie à Notre-Dame de Paris aux 12e et 13e siècles* (Turnhout, 2008) on three- and four-part *organa*. Other discussions of melodic composition have tended to centre around the study of the *VOT* (Biblioteca Apostolica Vaticana, Ottoboni lat. 3025); on this, see Steven C. Immel, ‘The Vatican Organum Treatise Re-examined’, *Early Music History* 20 (2001), 121–172; Leo Treitler, ‘The Vatican Organum Treatise and the Organum of Notre Dame of Paris: Perspectives on the Development of a Literate Culture in Europe’, in *With Voice and Pen: Coming to Know Medieval Song and How it was Made* (New York, 2003), 68–83; Anna Maria Busse Berger, ‘Compositional Process and the Transmission of Notre Dame Polyphony’, in *Medieval Music and the Art of Memory* (Berkeley CA., 2005), 161–197.

2 Rebecca Baltzer, ‘Notation, Rhythm, and Style in the Two-Voice Notre Dame Clausula’, 2 vols. (Ph.D. diss., Boston University, 1974). Though the primary purpose of Baltzer’s study is to offer a chronological reading of this repertory based largely on aspects of rhythm and its notation, examples of discussion that
Indeed, Baltzer’s study highlighted a number of specific cases where the duplum voices of clausulae appear to ‘play against’ the structure of the tenor with their own systems for organising material. Her findings suggested that one of the underlying motivations influencing creators of clausulae lay in the desire to draw out and exploit possibilities presented by particular duplum ideas. Working separately, though at about the same time, Rudolf Flotzinger also devoted attention to questions of duplum formulation in his repertorial study, Der Discantussatz.3 Arguing for a narrative of compositional development linked to what he regarded as the increasing sophistication of upper voice design, Flotzinger commented upon the prevalence of duplum voices that made sustained use of specific techniques for arranging melodic material – material that did not simply replicate the structure of the tenor but appeared increasingly autonomous in its design.4

From these commentaries and onward, scholarship has been receptive in considering elements of upper voice design within the Notre-Dame repertory. Moreover, this growing awareness has given rise to several studies that pay particular consideration to the construction of upper voices, though only a few have focussed specifically on clausulae. Some of these studies, including those of Wulf Arlt and Catherine Bradley, have focussed attention upon individual clausulae that bear witness to especially pronounced examples of musical experimentation, or the sustained use of particular melodic figures within a piece.5 Others have been more interested in those compositional ideas that can be identified and tracked across the clausula repertory.6 What seems to connect both ends of this methodological spectrum, however, is the flexibility of the melodic materials in question, both within an individual setting and from piece to piece.7 The often subtle ways that duplum

4 Ibid., 169.
7 These dual perspectives, to some extent, are brought together in two articles by Edward Roesner: ‘Who “Made” the Magnus Liber?’ Early Music History 20 (2001), 227–66, and ‘Notre Dame’, in Mark Everist and
melodies may vary as they pass around the repertory – seemingly subject to constant change and reworking – makes their analysis somewhat challenging.\(^8\) Insoluble questions of melodic quiddity, of what actually constitutes a melodic idea, and how one is to identify instances of reuse from a modern analytical perspective, all come to bear on this process, less indicative of a rigid compositional situation and more of the fluid practices and human behaviours of singers.\(^9\)

These analytical tensions seem also to have been recognised in one of the earliest attempts to catalogue melodic behaviours in upper voices, documented in Hans Tischler’s 1988 *Two-Part Parisian Organa* volumes. Observing that, across the repertory, ‘even seemingly individual phrases [of duplum melodies] are reused in various places’, Tischler qualifies his taxonomic approach by noting that ‘it is often difficult to decide whether a particular melodic fragment is merely formulated within the spirit of the style or whether it represents a consciously employed formula’.\(^10\) The culmination of a complete transcription of all surviving two-part pieces within this repertory, one of the purposes of Tischler’s work was the uncovering of evidence of melodic ‘formulae’ found chiefly across *organum purum* settings.\(^11\) And while twenty-seven such formulae are identified, the methodological issues engendered by his approach are equally if not more revealing. Similarly, Rudolf Flotzinger attempted to catalogue melodic ideas found across multiple *clausulae*, isolating nine recurring figures he regards as characteristic ‘Schlussgruppen’ or closing phrases to settings.\(^12\) However, the same set of analytical issues seems to face Flotzinger as Tischler: where the constantly changing nature of these melodic ideas makes their codification


\(^9\) For another consideration of this analytical issue, especially in terms of implications for the definition and identification of particular melodic ideas, see Sean Curran, ‘Hockets Broken and Integrated in Early Mensural Theory and an Early Motet’, *Early Music History* 36 (2017), 31–104.

\(^10\) Tischler, *The Parisian Two-Part Organa*, i, 32.

\(^11\) Ibid., i, lxiii–lxviii.

\(^12\) Flotzinger, *Der Discantussatz*, 180–1. For another attempt to catalogue concordances between *clausulae* (and also motets), see van der Werf, *Integrated Directory*. One more persuasive study of this issue can be found in the critical notes of Thomas B. Payne, ed., *Le magnus liber organi de Notre-Dame de Paris VI A–B: Les organa à deux voix du manuscript de Wolfenbüttel, Herzog August Bibliothek, Cod. Guelf. 1099 Helms*. (Monaco, 1996).
problematic. In fact, one of Flotzinger’s examples of a closing figure includes as many as eleven different, though apparently related, variant forms.\textsuperscript{13} The difficulties posed by this endeavour would therefore seem to make a comprehensive list of melodic figures and their relationships to one another difficult to document: the many variations, transpositions, and manipulations they frequently undergo often challenge easy identification. Yet read another way, the problems encountered through this taxonomic process speak to a fundamental characteristic of upper voice behaviours: their melodic fluidity articulates something about the scope of shared material and its reuse across the repertory. It is this aspect of upper voice composition that I will take as a starting point for my analysis.

One of the predominant means by which discussions of upper-voice behaviours have entered scholarship has been through the study of thirteenth-century theoretical treatises, and in particular, through notions of ‘\textit{color}’.\textsuperscript{14} A topic of rhetoric, and defined within music treatises as representing particularly memorable characteristics of melody – something to be discussed in greater detail below – \textit{color} appears to join discussions of compositional process to the aesthetic experience of hearing this music. Taken in a broad sense as a tool for cultivating melodic familiarity, the use of \textit{color} is something scholars have regarded as eminently traceable across organum and \textit{clausula} repertories, and may include various forms of melodic ornamentation, as well as ‘the systematic manipulation of melodic elements, both short motivic cells and entire phrases, through repetition and variation’ according to Edward Roesner.\textsuperscript{15} But where previous commentators have often used this theoretical standpoint as

\textsuperscript{13} One shortcoming with Flotzinger’s catalogue is the apparent lack of reference to the \textit{clausula} settings to which melodic ideas refer.

\textsuperscript{14} For an overview of medieval definitions and uses for this term see Gilbert Reaney, ‘Color’, in Friedrich Blume, ed., \textit{Die Musik in Geschichte und Gegenwart} 1\textsuperscript{st} ed., vol. 2 (Kassel, 1952); also ‘color’ in Michael Bernhard, ed., \textit{Lexicon musicum latinum medii aevi: Wörterbuch der lateinischen Musikterminologie des Mittelalters bis zum Ausgang des 15. Jahrhunderts} (Munich, 2001), fasc. 5, cols. 550–9.

the basis for identifying common melodic behaviours – in short, projecting theory onto practice – this study will pursue a different goal, starting from an analysis of duplum voices preserved within surviving clausula collections. My interest in the term ‘color’, then, is primarily to ask how such a characterisation may be seen to reflect this polyphonic musical practice, and to question what this says about how this music was perceived by singers and theorists in the thirteenth century.

In this regard, and in the repertory under consideration, my approach can be seen as distinct from Guillaume Gross’s study of three- and four-part organa, which offers a detailed examination of compositional techniques within these pieces, connecting the colores of Johannes de Garlandia’s treatise to the rhetorical devices of thirteenth-century artes poeticae. Gross’s demonstration of the types of musical strategies shared between pieces has the purpose of illustrating how fragmentary gestures can be woven together within a polyphonic composition – an interpretation that views these melodic behaviours as having a primarily organisational (and implicitly, a mnemonic) goal. Situating his discussion within the broader scholastic context of thirteenth-century Paris, Gross aligns this basis for melodic composition with treatises on grammar and rhetoric, viewing the creators of organa as masters of memory and oratory. But the result of an analytical approach that moves from theory to musical practice is the construction of a model that seems less able to deal with the frequently interacting melodic behaviours of that practice. And while the repertory of three- and four-part organa often appears to exhibit a pronounced degree of organisation in its use of materials, I shall argue for a more fluid melodic situation in the case of the duplum voices of the two-part clausula repertory.

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16 See Gross, Chanter en polyphonie and ‘Organum at Notre-Dame’. The issue of the transmission of Garlandia’s treatise, including the discussion of color in the final chapters of its Parisian witness, will be touched on below (see 239–249).

17 This can be seen to build on Mary Carruthers’ discussion of memory and its power as a generative tool for [literary] composition in The Book of Memory: A Study of Memory in Medieval Culture, 2nd ed. (Cambridge, 2008), 80; and also The Craft of Thought: Meditation, Rhetoric, and the Making of Images, 400–1200 (Cambridge, 1998), 7–59.

18 On the relationship between the teaching of music at the University of Paris and practical music-making, see above at 3, n. 11.

19 Gross, Chanter en polyphonie, 140. There remain significant questions as to the exact relation between the teaching of music (and other topics) at the University of Paris and practical music-making in the broader context of medieval Paris – indeed, this is a subject that would benefit from further research.
Other discussions about upper voice formulation have been prompted by issues concerning the interaction between oral and written practices, with some scholars acknowledging the growing constitutive role writing appears to play in this repertory while others argue for the possibility of sophisticated polyphonic designs created within an oral practice. In a consideration of medieval modes of composition, Leo Treitler has examined the domains of literate and non-literate practice, as well as notions of medieval improvisation through the Vatican Organum Treatise;²⁰ Anna Maria Busse Berger has sought to understand how medieval techniques of memorisation influenced music pedagogy and composition;²¹ and Jennifer Roth-Burnette,²² building on the work of Edward Roesner in ‘Who “Made” the Magnus Liber?’, has drawn compelling parallels between the compositional process within organum purum and the creative processes that constituted the medieval ars memoriae. Such studies have viewed characteristic elements of an organum’s upper voice – for instance, the role of ‘stock’ phrases and recurring melodic gestures – as representative of an oral culture within which this repertory developed. And although the analytical paradigms of ‘oral’ and ‘literate’ do not bear directly on the methodological approach of the present study, this prior work offers starting points not only for thinking through instances of reuse identifiable across the clausula repertory, but also for understanding the working methods of those who set about creating this polyphony.²³

Emphasis upon a culture of creativity and experimentation within the clausula repertory also stands as the point of departure for Susan Rankin’s reading of a setting based upon the LATUS melisma (from the Alleluia for Easter Day) and its associated motet materials. Noting the use of repeating melodic patterns against a changing tenor melody as a ‘strong distinguishing quality’ of the clausula, Rankin argues for ‘a community in which new

²⁰ See Treitler, With Voice and Pen, particularly chapters 1 (‘Medieval Improvisation’), 3 (‘The Vatican Organum Treatise and the Organum of Notre Dame of Paris’), and 10 (‘Oral, Written, and Literate Process in the Music of the Middle Ages’).


ways of handling material were handled with enthusiasm’. 24 And this foregrounding of melodic experimentation has been taken further in the work of Catherine Bradley; both studies provide thoughtful analytical models upon which my work seeks to build. In compelling analyses of two LATUS 25 and REGNAT 26 clausulae and their related motets, Bradley argues for a situation in which ‘makers of clausulae relished and even engineered compositional challenges’ for themselves – testament to the desire to search out and play with melodic materials in polyphonic contexts. 27 Putting ‘game-playing’ at the centre of discussion, she explores those mechanisms by which an upper voice can be seen to draw out certain melodic ideas in sustained ways, for example, through repetition and variation. 28 Unlike Rankin and Bradley, however, my focus is less to do with clausula-motet interactions. Moreover, my analytical goal is a different one. That is, I am concerned with recognising the diversity of melodic behaviours that can be used across upper voices of clausulae and their interrelationships, questioning how far ‘play’ with an idea may be taken. Since this an argument made most convincingly by illustration, I thus work from a study of clausulae upon a single melisma outward, demonstrating at once the particular behaviours in operation within an individual setting and how those behaviours may be situated within the broader context of the repertory.

Certainly, in the light of existing scholarship, the case for a sustained culture of creative composition based upon particular melodic techniques for formulating upper voices of clausulae is strong. Less appreciated and less understood is how such techniques came to be utilised by singers across the repertory, and how they may relate to one another. It would not be surprising in this context, however, to find one particular melodic figure – for example, a repeated-note pattern, as I will show below – explored in several different ways among clausulae, or that a single melodic figure may be subtly adapted across settings to suit a variety of contrasting musical situations. Not only to be viewed as isolated expressions of musical creativity, I come to argue, the sustained exploration of particular melodic techniques may also be situated within a broader context of compositional norms; at once, they are

25 Bradley, ‘Origins and Interactions’.
27 Ibid., 90.
28 Ibid.
aesthetic moments in themselves, but also musical ideas born out of commonplace behaviours of this repertory. Consequently, I posit that this musical play within upper voices attends to and takes inspiration from singers’ shared approaches to composition. Moreover, the amplification of musical play through the sustained use of musical techniques offers an opportunity to better understand the underlying principles of composition as well as the motivations of singers. This is a premise that shapes my approach in what follows, and my analyses suggest that the use of one melodic figure may be linked to a network of others, their often self-conscious exploration within a particular clausula thus modulating our view of compositional behaviours across the repertory.

Considered in these terms, it is unsurprising that the compositional fundament of a clausula’s upper voice is perceptually challenging to unravel; its multivalence requires sustained attention and close analysis. Further, it demands ‘a plural, even promiscuous analytical method’ – to draw upon an approach developed by Sean Curran in the context of polytextual motets – in order to sketch out the range of stylistic resources from which a clausula may have been created. The myriad of uses for a given melodic technique may be complex and complicated, sustained through a diverse transmission, subject to reuse and reinvention; thus, a number of contrasting analytical approaches may be required in order to recognise such techniques from piece to piece. To that end, in what follows, I happily seek out the many different directions for interpretation presented by individual case studies – in so doing, I hope to demonstrate precisely this plurality in action. At the heart of the method of this chapter, therefore, is a desire to recognise the individuality of clausulae – of the imaginative ways a setting may explore its own musical ideas. But I endeavour also to look beyond the individual use of melodic techniques to consider their significance for the broader

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29 Such a point also comes to highlight a degree of subjectivity in the choice of vocabulary when describing such phenomena and the kinds of aesthetic judgements that underpin the interpretative frameworks of these analytical arguments.

30 This idea builds on discussions of the social context of play (though in a twentieth-century context) in Will Cheng, Sound Play: Video Games and the Musical Imagination (Oxford, 2014). See also Roger Moseley, Keys to Play: Music as a Ludic Medium from Apollo to Nintendo (Berkeley, CA, 2016). In a medieval and early modern context see Christopher Page, The Owl and the Nightingale: Musical Life and Ideas in France 1100–1300 (London and Berkeley, CA, 1989), and Serina Patterson, ed., Games and Gaming in Medieval Literature (New York, 2015).

repertory – to investigate the scalability of particular musical ideas and explore their spectrum of uses across clausula settings.

Only a small proportion of the clausula repertory can be discussed here; no claim is made for full representation. Indeed, my point of departure for discussion is a group of clausulae based upon a single passage of one Office chant melody – settings which, in themselves, may appear as particularly pronounced examples of the upper-voice behaviours with which I am concerned. Engaging with existing strands of scholarship, my work thus seeks to contribute to discussion by delineating some of the common techniques for making a duplum voice and in turn, to persuade of the possibilities available to singers in this creative process. Additionally, it newly considers the relationship between upper voice designs and a clausula’s tenor. In turning a close eye to tenor-duplum interactions, I seek to demonstrate that, while the upper-voice behaviours of some clausulae appear closely linked to structural models established by the tenor, in other cases, their relationship is more complex. Considered across the repertory, it becomes clear that clausulae exhibit shifting hierarchies between tenor and duplum voices that begin to unsettle traditional conceptions of the tenor as the starting point for composition. Far from a monolithic characterisation of the compositional processes involved in fashioning an upper voice, then, this chapter uncovers diverse applications of individual melodic techniques that are not only traceable at the local level, within a ‘family’ of settings on a single melisma, but through many different clausulae, upon a number of different chant melodies. The exploration of different creative possibilities in the collection of case studies presented below thus seeks to throw light on the compositional techniques available to creators of clausulae; as a result, it hopes to introduce new ways of understanding how an upper voice may be constructed.

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32 For an overview of these traditional conceptions in scholarship, see chapter 1 above, at 45–46. The potential for upper voices to impact on the structure of a polyphonic setting is a point that becomes much more readily observable – and thus, more widely recognised in scholarship – towards the end of the thirteenth and in the fourteenth century. On this, see as a starting point Anna Zayaruznaya, Upper Voice Structures and Compositional Process in the Ars Nova Motet (Oxford, 2018).
2. **Tanquam: A Case Study**

For creators of *clausulae*, the compositional possibilities for fashioning a duplum voice against a plainchant tenor must have been extraordinarily abundant. That is, if surviving *clausula* collections are to be read as witnesses to the extent of this creative endeavour, they paint a picture of the considerable scope and diversity of compositional efforts. ³³ Most tangibly, as singers devised melodic materials to set against rhythmically measured tenors and developed techniques for elaborating upon those materials, their work gave rise to many new polyphonic responses to plainchant melismas. But more than this, from piece to piece, the melodic materials and techniques being used to build a duplum voice were constantly being altered, freely experimented with, discarded, reformulated. Such sustained exploration of melodic behaviours suggests a musical practice built upon shared processes of composition where singers continuously played off one another’s ideas. As part of what appears to have been an ever-expanding array of strategies for creating a duplum voice, I want to suggest that the individual application of particular melody-building techniques invites interpretation against the backdrop of a large and inter-connected web of compositional procedures that can be charted across the *clausula* repertory. And the exploration of these procedures – in different ways, and for different musical ends – in itself seems to be a defining tenet of the creative process. From individual melodic figures to large-scale structures, the extent to which the recasting of melodic materials is evidenced across the repertory speaks to a highly interactive, intertextual situation in which this polyphony was cultivated, and signals a fundamental premise of this musical practice – one based on the frequent reuse and reformulation of upper voices. ³⁴ In this section, I set out to investigate this situation by first examining one group of *clausulae* based upon a single chant melisma so as to sketch out the range of procedures that underlie their formulation. By turning a close eye to

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³³ In all likelihood, surviving manuscript sources represent only the ‘tip of an iceberg’ of the repertories they transmit, as Nino Pirrotta proposes in *Music and Culture in Italy from the Middle Ages to the Baroque: A Collection of Essays* (Cambridge, MA, 1984), 72. That is to say, a basic assumption underlyng this approach is that the scope of compositional practice was greater than that which is represented in surviving manuscripts.

³⁴ Musical intertextuality and citational interaction among musical settings is a topic that has received far greater scrutiny in studies of refrain melodies (and the motet); my analytical approach draws strength from many scholars’ work in this regard. In particular, see Ardis Butterfield, ‘Repetition and Variation in the Thirteenth-Century Refrain’, *Journal of the Royal Musical Association* 116 (1991), 1–23; Clark, ‘“S’en dirai chançonete”: Hearing Text and Music in a Medieval Motet’, *Plainsong and Medieval Music* 16 (2007), 44–54; and Jennifer Saltzstein, *The Refrain and the Rise of the Vernacular in Medieval French Music and Poetry* (Rochester, NY, 2013), 1–34.
the different ways melodic material can be worked out across just one melisma, I attempt to
delineate and analyse compositional procedures involved in creating a duplum voice among
these settings. In turn, this test case shall serve as a basis for thinking about creative
processes for devising an upper part more broadly, and the procedures uncovered here will be
taken up for more detailed discussion in later parts of this chapter.

The melisma in question, upon the word TANQUAM,\(^{35}\) begins the verse of the Office
responsory Descendit de celis (O2) – a chant melody to be sung (in a Parisian rite) on
Christmas Day as the third responsory of the night office, and also on its octave, 1 January,
the Feast of the Circumcision, at first vespers.\(^{36}\) Importantly, it is a melisma subject to
considerable compositional attention as the foundation of clausula settings in surviving
manuscripts, to an unusually high degree. Unusual, that is, because unlike so many of the
melismas drawn from Mass chants which frequently garner several different polyphonic
formulations among sources, Office melodies are rarely represented to the same extent:
manuscripts typically preserve no more than one or two separate clausulae in addition to their
appearance within an organum.\(^{37}\) In the case of the TANQUAM melisma, however, twelve
different two-voice clausula settings are recorded a total of seventeen times across different
manuscript witnesses, as shown in Table 3.1;\(^{38}\) in fact, it is the most widely set portion of an
Office melody in the clausula repertory. All but one of these clausulae can be found in some
form within manuscript F – the only exception is a setting preserved in W\(^1\) (TANQUAM 5).\(^{39}\)
Even this clausula has a connection to F, however, since the TANQUAM melisma is shared
with another chant, Et valde V. Et respicientes (O7), and the music for TANQUAM 5 appears
transmitted in the organum setting of O7 within manuscript F.\(^{40}\) Two other settings have

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\(^{35}\) As in medieval literature more generally, two different spellings of this word can be identified, apparently
used interchangeably: F uses the form ‘tanquam’, while in W\(_1\) and W\(_2\) it is spelt ‘tamquam’. Henceforth, I
consistently use the former, since F contains the greatest number of polyphonic settings of the melisma.


\(^{37}\) Excluding the TANQUAM melisma, the next most widely set Office melody among clausulae is the
melisma ET IHERUSALEM, from the Christmas responsory Iudea et Iherusalem, which receives three different
versions recorded in F.

\(^{38}\) The numbering of clausulae in Table 2.1 corresponds to Norman Smith’s labelling in ‘The Clausulae of

\(^{39}\) On this, see Norman Smith, ‘Interrelationships among the Alleluias of the “Magnus liber organi”, *Journal

\(^{40}\) For more on the melodic interrelationships discernible between Descendit de celis and other first mode
responsories, see as a starting point Katherine Eve Helsen, ‘The Great Responsories of the Divine Office:
been marked by scholars as possible transcribed motets (shown in bold in Table 3.1), and, speaking further to this musical diversity, $F$ also records a significant number of unicum settings of the melisma – five clausulae in total – all of which are recorded in close proximity within the manuscript.

Table 3.1  List of TANQUAM clausulae witnesses and concordances

<table>
<thead>
<tr>
<th>Clausula No.</th>
<th>MS</th>
<th>Folio and System No.</th>
<th>Motet concordances</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$W_1$</td>
<td>17$^1$ 148$^4$ IV</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$F$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>$W_1$</td>
<td>49$^2$ I 55$^3$ IV</td>
<td>$F$ fol. 381$^8$; $W_2$ fol. 129$^9$; $Ma$ fol. 102$^5$; $W_2$ fol. 145$^6$; $StS$ fol. 1$^1$ frag.</td>
</tr>
<tr>
<td></td>
<td>$W_1$</td>
<td>65$^6$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$F$</td>
<td>54$^4$ I 147$^7$ VI</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>$W_1$</td>
<td>55$^5$ II 69$^9$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$F$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>$W_1$</td>
<td>55$^5$ I 147$^7$ I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$F$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>$W_1$</td>
<td>55$^5$ II 69$^9$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$= F$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$O7$</td>
<td>[ET RESPICI]ENTES</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[ET]</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[RESCI]</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[PI]</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[ENTES]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>$F$</td>
<td>147$^7$ II</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>$F$</td>
<td>147$^7$ III</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>$F$</td>
<td>147$^7$ V</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>$F$</td>
<td>148$^8$ II</td>
<td>$W_2$ fol. 253$^3$; $Mo$ fol. 233$^y$</td>
</tr>
<tr>
<td>10</td>
<td>$F$</td>
<td>148$^8$ VI</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>$F$</td>
<td>148$^8$ I</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>$F$</td>
<td>10$^6$</td>
<td>$W_2$ fol. 154$^4$; $W_2$ fol. 205$^5$; $Cl$ fol. 371$^7$; $Ba$ fol. 55$^8$; $Muβ$ fol. III$^3$; $Mo$ fol. 46$^6$</td>
</tr>
</tbody>
</table>

Certainly, this level of polyphonic interest can be attributed to the liturgical significance of the feast on which this melody was sung; the rendering of chant in polyphony on the second most important day of the church year no doubt would have been especially

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42 For more on issues of organisation and the arrangement of clausulae in fascicle 5 of $F$, see Adam Mathias, ‘Collecting Clausulae, Shaping the Past’, in Karl Kügle, ed., Sounding the Past: Music as History and Memory (Turnhout, forthcoming).
encouraged. And as the most elaborate melisma in the whole *Descendit de celis* chant, singers would have been especially drawn to this moment as a site for compositional invention. Indeed, this melody has a long history as a traditional site for musical elaboration – in a monophonic context, it was widely known as a basis for embellishment and new composition by singers. But, to take up an intimation made by Catherine Bradley in her analysis of another chant melisma – *REGNAT*, from *Alleluia V. Hodie Maria* (M34) – and its associated *clausulae*, there may also have been musical appeal attached to particular chant melodies and specifically, to their structural properties, that further sparked singers’ creative flair. Example 3.1 presents a transcription of the *TANQUAM* melisma as it is preserved in one 13th-century source – BnF Lat. 15181, a breviary of Parisian use. Here, the forty-five-note melody is constituted of three sections, labelled A, A’, and B in the example; these sections are distinguishable by their own internal structure. Specifically, the first eleven notes of the melisma, marked as A, are immediately repeated as A’, with the first note omitted. The A and A’ sections are themselves built upon internal melodic repetitions: in each case, the four-note melodic figure shown as x (b-c-a-g) is repeated in sequence as x’. But, to build on Bradley’s proposition, it may not only have been the inherent repetitions of the chant that captured the imaginations of singers. To acknowledge only this aspect of a melisma as of potential interest seems to fall shy of fully recognising the scope of affordances provided by a chant melisma as it comes to be organised in measured rhythm. For in addition singers may have also been aware of, and drawn to properties of the chant quite beyond the underlying repetitions of the melisma – properties that may be newly articulated within a rhythmically measured tenor. As shall be discussed below, these features may have also influenced the organisation of a *clausula*’s tenor foundation and thus, had an impact upon the design of its upper voice.

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43 On the desire to adorn significant feasts in the church calendar with polyphony see Michel Huglo, ‘Les débuts de la polyphonie à Paris: les premiers *organa* parisiens’, *Aktuelle Fragen*, 93–163; and Wright, *Music and Ceremony*, chapter 7 (Gothic Polyphony) and 9 (Traditions of Musical Performance).


45 Catherine A. Bradley, *Polyphony in Medieval Paris*, 85.


47 This is a point discussed in detail earlier above, at 112–127.
Musical fascination with this melisma documented across clausula collections also chimes with possible semantic interpretations of the word ‘tanquam’ itself. The text of the chant is as follows:

R. Descendit de celis missus ab arce patris; introivit per aurem virginis in regionem nostram indutus stola purpurea: et exivit per auream portam lux et decus universae fabricae mundi.

V. Tanquam sponsus dominus procedens de thalamo suo.

Rep. Et exivit per auream portam lux et decus universae fabricae mundi.

‘Tanquam’, as it appears at the beginning of the verse of the chant, simply means ‘as’ or ‘like as’: here, it forms a subordinate conjunction linking the verse with the responsory, implying comparison to the previous clause while introducing the nominative subject ‘sponsus’ (bridegroom). But this was not its only medieval usage – in other contexts, ‘tanquam’ was known to mean ‘for instance’, or ‘for example’.\(^{48}\) This alternative definition has particular relevance in consideration of the clausula collections that preserve multiple settings of the

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TANQUAM melisma. Indeed, since *clausulae* set the portion of chant upon TANQUAM in isolation, and when copied, it is just this single word that appears beneath a setting, the original textual context from which one is able to perceive its precise meaning has been removed. A collection of TANQUAM *clausulae*, such as the nine polyphonic settings found within the fifth fascicle of *F*, might thus be seen to play with the semantic possibilities of this word and the potential for interpretative ambiguity. While the link to its liturgical context is likely to have been well understood by scribes and readers, a more figurative interpretation could also have been drawn out – that is, as a commentary upon the numerous different polyphonic settings that have been preserved together. Put plainly, if ‘tanquam’ were read as meaning ‘for example’, a page within *F* such as fol. 147v (shown in Example 3.2) can rather appropriately be seen to present a series of contrasting musical examples that demonstrate a range of possibilities for setting the melisma in polyphony.

**Example 3.2**  TANQUAM *clausulae* preserved in *F*, fol. 147v
The musical treatment of this melisma among clausula settings, however, is less straightforward than might initially be expected. Typically, since the melisma begins the verse of the responsory, one would anticipate, in the context of an organum, the first note of the chant to be treated freely in a purum texture before then moving into discant – such as is the case on the first tenor pitch of the setting on fol. 65v of F, shown in Example 3.3. But interestingly, as Rebecca Baltzer has observed, the initial a of the chant melody is repeated once more at the opening of the discant section despite the fact that chant sources do not repeat this pitch – a relatively unusual phenomenon across surviving organa.\(^{49}\) What is more, this particular treatment of the TANQUAM melody appears far from an isolated musical behaviour; in fact, in every known witness of a TANQUAM clausula, the first a of the chant melisma serves as the opening of the discant setting. Such a discrepancy between chant sources and polyphonic settings seem to invite two kinds of reading. For one, as Baltzer proposes, the case presented in Example 3.3 might suggest that the substitution of a clausula setting into the organum has been made, ‘and that, for whatever reason, scribal care was not taken to make the fit as precise and correct as it might be’.\(^{50}\) For another, it could indicate that the clausula settings of TANQUAM were conceived of less within the context of an organum, and more as individual polyphonic settings in their own right: that it was the melisma, rather than the wider chant, that became the focus of sustained compositional activity. At the least, the implication is that creators of clausulae were able to exercise a degree of flexibility in the treatment of the chant, and as argued earlier, exact adherence to the liturgical melody was not of paramount concern.

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\(^{50}\) *Ibid.* Another possibility is that makers of discant on this melisma simply did not want to begin a measured passage on the tenor b, and thus repeated the a of the chant.
In this creative light, what can now be said about the specific techniques used for creating a duplum voice above the TANQUAM melisma? And what might be learnt about the relationship between a duplum and its tenor foundation in this creative process? In a compositional sense, the twelve distinct settings of the TANQUAM melisma betray considerable diversity in their polyphonic designs, as the range of rhythmic patterns found among clausula tenors testifies. In terms of rhythmic arrangement, ten different formulations of the chant melody can be identified across witnesses, from regular, repeating ordines in the fifth mode, to first and second mode patterns, and more irregular groupings of longs, as shown in Table 3.2.\textsuperscript{51}

Table 3.2  Rhythmic arrangement of TANQUAM clausula tenors

<table>
<thead>
<tr>
<th>Clauula No.</th>
<th>MS</th>
<th>Folio and System No.</th>
<th>Tenor rhythmic arrangement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$W_1$</td>
<td>17$^v$ 148$^v$ IV</td>
<td>(\uparrow\downarrow\uparrow\downarrow\ ...)</td>
</tr>
<tr>
<td></td>
<td>$W_1$</td>
<td>49$^v$ I 55$^v$ IV 65$^v$</td>
<td>(\downarrow\downarrow\downarrow\ ...)</td>
</tr>
<tr>
<td></td>
<td>$W_1$</td>
<td>54$^v$ I 147$^v$ VI</td>
<td>(\downarrow\downarrow\downarrow\ ...)</td>
</tr>
<tr>
<td></td>
<td>$W_1$</td>
<td>55$^v$ I 147$^v$ I</td>
<td>(\downarrow\uparrow\downarrow\uparrow)</td>
</tr>
<tr>
<td></td>
<td>$F$</td>
<td>147$^v$ II</td>
<td>(\downarrow\downarrow\downarrow\ ...)</td>
</tr>
<tr>
<td></td>
<td>$F$</td>
<td>147$^v$ III</td>
<td>(\downarrow\downarrow\downarrow\ ...)</td>
</tr>
<tr>
<td></td>
<td>$F$</td>
<td>147$^v$ V</td>
<td>(\uparrow\downarrow\downarrow\downarrow\uparrow)</td>
</tr>
<tr>
<td></td>
<td>$F$</td>
<td>148$^v$ II</td>
<td>(\uparrow\downarrow\downarrow\uparrow)</td>
</tr>
<tr>
<td></td>
<td>$F$</td>
<td>148$^v$ VI</td>
<td>(\uparrow\downarrow\downarrow\uparrow)</td>
</tr>
<tr>
<td></td>
<td>$F$</td>
<td>148$^v$ I</td>
<td>(\uparrow\downarrow\downarrow\downarrow\uparrow)</td>
</tr>
<tr>
<td></td>
<td>$F$</td>
<td>10$^v$</td>
<td>(\uparrow\downarrow\downarrow\uparrow\uparrow\uparrow)</td>
</tr>
</tbody>
</table>

\textsuperscript{51} The three tenors in Table 3.2 set in unpatterned series of longs are distinct from one another in their divisions of the chant melody; it is thus only clausula nos. 6, 7, and 10, that have the same rhythmic arrangement.
Significantly, these tenor arrangements can be seen to afford quite different compositional opportunities for singers, providing a number of contrasting foundations upon which to formulate a duplum voice. What these twelve individual clausulae appear to demonstrate is not only the working out of a number of different ways to perform the same chant melisma, but also, the opportunity to explore numerous duplum voice behaviours over this melisma. In this regard, the TANQUAM clausulae provide an especially inviting starting point for identifying approaches to clausula composition and the working out of musical ideas against a tenor melisma.

In what is to follow, my aim is to use the TANQUAM clausulae as a means of entry into a more considered discussion of compositional behaviours at work within the repertory than is currently available in scholarship. But my intention is not simply to offer a catalogue of duplum voice techniques, nor is it to offer a blow-by-blow account of behaviours observable within the TANQUAM set. By beginning from this small collection of clausulae, I hope, rather, to give space to fundamental, though largely unexplored questions of how such polyphonic settings were created that necessarily require individual analytical responses – questions that can then be posed more sharply when looking across the clausula repertory. In so doing, one aim of the next section is to develop new methodological approaches through which to consider the melodic behaviours of duplum voices and their relationships to tenor voices. In turn, an examination of the different procedures used in the repertory would also offer insight into the processes that underlie these compositional behaviours, shedding light on the ways that singers responsible for acts of musical creation worked.

TANQUAM 4

One conspicuous example in which the sustained use of a particular melodic idea can be observed among the TANQUAM clausulae is in TANQUAM 4, recorded in W1 (fol. 55r I) and F (fol. 147v I). Between its two witnesses, this clausula is preserved with an evident consistency: apart from the fact that the version in F contains a purum ending that is not present in the W1 witness – a fairly common phenomenon across the two manuscripts – only small, primarily notational differences obtain.52 TANQUAM 4 is also known in the form of a

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52 These are most evident at the end of the duplum of the clausula, since F contains a number of stroke marks that are not present in W1. One notational ‘irregularity’ identified by Rebecca Baltzer in both settings is
motet, *Ad veniam perveniam* – a piece with its own broad network of transmission. But it is the design of the *clausula*’s duplum voice that is of special interest here, for it seems to be premised upon the exploration of a limited set of melodic figures. Moreover, the primary means by which these figures are explored within the piece introduces the first compositional technique to be scrutinised in this investigation – namely, the use of melodic sequence.

Example 3.4 presents a transcription of this *clausula* from $W_1$. Set in the third mode, the structure of the *clausula* is based around an antiphonal exchange between the tenor, which has been arranged into regular four-note phrases, and the duplum voice. The opening figure of the duplum (labelled $x$), is immediately taken up in the second phrase ($x'$) – shifted down a tone and adapted so that the phrase now outlines a stepwise descent from $e$ to $d$. (The reasons for this alteration will be discussed below.) The third phrase is an exact repetition of $x'$, again down a tone. Then follows a second melodic idea, $y$, constructed upon a repeated-note figure which is repeated sequentially over the course of four phrases, the last of which is elaborated upon and extended. A further instance of sequential development of a melodic idea can be identified at $z$ – a figure that is itself an expansion of $x'$, now five longs in length: once more, this duplum phrase is restated immediately down a step. Finally, in the second half of the *clausula*, a new idea is introduced, circled in the example; this works out sequential descending movement on a larger scale, extending across several duplum phrases. First presented as a single long on $c$, this lone pitch moves down a tone at its next sounding two *ordines* later, before the idea dissolves on moving to an $a$. Even where duplum phrases are not used in sequence, the preoccupation with exploring melodic ideas already introduced in the *clausula* is clearly discernible. Three phrases in the second half of the *clausula*

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53 On this, see Hendrik van der Werf, Integrated Directory of Organa, Clausulae, and Motets of the Thirteenth Century (Rochester, NY, 1989), motet 635 (at 103). *Ad veniam perveniam* is preserved as a three-part monotextual motet ($F$ fol. 381r and $W_2$ fol. 129r), as a two-part motet ($W_2$ fol. 145r and StS fol. 1v frag.), and as a setting of duplum and triplum voices without the tenor ($Ma$ fol. 102r).

54 My transcription agrees exactly with that of Edward Roesner, ed., *Le magnus liber organi de Notre-Dame de Paris VII: Les organa et les clausules à deux voix du manuscript de Wolfenbüttel, Herzog August Bibliothek, Cod. Guelf. 628 Helmst.* (Monaco, 2009), no. 85, 249, except at the point marked * in Example 3.4. Here, Roesner transcribes the two-note ligature as $g-a$ while the manuscript apparently records $g-b$. 

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the occasional use of a binary ligature and a simplex long (2li + si) that could have been written as a ternary ligature (3li) in the duplum. This, to Baltzer, suggests the possibility of a first-mode pattern over a third-mode pattern. See Baltzer, ‘Notation, Rhythm, and Style’, 148.
Example 3.4  TANQUAM 4, W1 fol. 55v I
(marked by dotted brackets) begin in the same way as the opening figure, \( x \), and the \( x' \) idea, for instance, is also used in inversion (shown as \( x'' \)). This all suggests that the creation of the duplum voice is underpinned by a very controlled, though readily adaptable set of ideas. It also makes a strong case for the use of sequential movement throughout the clausula to be understood as a characteristic element of the duplum’s design; part of the delight of the upper voice seems to be in exploring just how far a sequential idea can be pushed.

This compositional aesthetic is further supported by consideration of the tenor of TANQUAM 4. Indeed, turning attention to the foundation of this clausula not only offers additional insight into the formulation of the duplum, since it reveals information about the rhythmic design, the phrase structure, and notions of consonance within the setting; it also brings to the fore the highly inter-related nature of the two voices.

The opening phrase of the clausula serves as a case in point, for the first melodic idea of the duplum appears to play with its polyphonic foundation in a deliberate way. This is because the upper voice, which begins the antiphonal dialogue of the setting, opens with a proleptic statement of the first four notes of the TANQUAM melisma, shifted up a fifth. And since the lower voice enters two longs later, for a moment the duplum part sounds alone – a solo voice, faithfully stating the opening of the chant melisma (albeit at an unusually high tessitura). That is, the game of the duplum voice here, facilitated by the antiphonal design of the clausula, seems not only to be in its imitation of the tenor’s melodic material, but significantly, the way in which it pre-empts this material. It is only once the tenor voice enters that the true statement of the TANQUAM melody is revealed and the relationship between parts can be discerned. Yet, this example is not the only case in this clausula where the duplum draws upon melodic properties of the tenor; in several instances throughout the setting, the upper voice appears to explicitly replicate the profile of the chant. Significantly, while observations about a shared melodic vocabulary of upper voices and chant tenors are well-acknowledged in the context of organum purum, that a clausula may pre-empt chant materials seems to present a fundamentally new way of interacting with a tenor melody.\(^{55}\)

Another situation in the first part of the upper voice that resembles material to be heard later in the tenor is the repeated-note figure labelled \( y \) in Example 3.5. In this case, \( y \) appears to anticipate an analogous moment in the chant melody, boxed in the example,

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\(^{55}\) The most extensive consideration of the relationship between chant and the upper voice melodies of organum purum can be found in Fritz Reckow, ‘Das Organum’, 457–65. For a more recent investigation of this melodic interrelationship, see also Roth-Burnette, ‘Organizing Scripture’, 31–44.
formed of repetitions on the note $f$. Specifically, the sequential restatements of the duplum’s $y$ figure, moving in step over three phrases from $f$ to $d$, appear to have been deliberately devised so as to imitate this specific portion of the melisma containing repeated notes, drawing attention to this feature of the tenor through sustained reiterations. Such an idea may also explain why, once the repeated $f$s of the chant had been sounded, the $y$ figure then terminates.

Example 3.5  Opening of TANQUAM 4, $W_1$ fol. 55r I

Additionally, the ascending scalic motion of the chant, such as is found in the third and the eighth ordo of the tenor (marked at * in the example), seems to have been an idea taken up and explored in the duplum voice. In the eighth ordo, for instance, the first three-note figure $a$-$b$-$c$ of the duplum pre-empts the scalic figure of the tenor that follows immediately (circled in red), just as the duplum had pre-empted the tenor at the beginning of the clausula. In the next phrase, the duplum restates this idea up a tone as $b$-$c$-$d$ which is again reciprocated by a similar motion in the tenor, now beginning on a $g$. Later in the
**clausula**, the duplum elaborates upon the scalar motion of the tenor, shown at z, in a similar way: the tenor’s four-note rising figure, which ends on a b is extended by the duplum voice which continues the scalar ascent up to a d. In these instances, the upper voice might not only be viewed as offering a response to the tenor melisma, but it also illustrates a situation where much of its melodic vocabulary appears closely related to, and directly derived from the underlying chant material. This shared melodic vocabulary seems to be an important feature of the *clausula*, for it establishes a melodic continuity between parts that at once provides the creative foundation of the duplum voice while also facilitating the elaboration of the duplum through sequential design.

It is not only the shared melodic material between the tenor and duplum of *TANQUAM 4* that points towards the interconnected nature of these two voices, however; the rhythmic organisation of the tenor, and the harmonic relationship between the parts also demonstrate ways in which the duplum voice draws inspiration from the organisation of its plainchant foundation. The first three *ordines* provide a case in point (numbered in Example 3.5): here, the first phrase of the tenor can be seen to outline a melodic figure beginning and ending on a; the second phrase restates this figure exactly, down a tone on g; and the third moves down a tone again, beginning on an f, though now the melisma outlines a scalar ascent from f-b flat. The descending melodic sequence established in these phrases can be seen to enable a consistency in the use of consonance between parts. Every interval with the duplum figure x in Example 3.5 forms a consonance of a perfect fifth with the tenor – the e at the end of the first duplum phrase aligns with the tenor a, the d at the end of the second with the g of the tenor, and so on. This situation also provides an explanation for the alteration of the figure x to x’ in the duplum. For if figure x were to be maintained across the first three phrases of the duplum, the consistent harmonic relationship between voices, centred around a perfect fifth, would be disrupted. If x’ – the altered form of x – were to appear at the opening of the setting, however, the upper voice would have to begin on an f and the imitative game between tenor and duplum material would be lost. One plausible rationale for the variation in the melodic figure at the opening of the duplum, therefore, is the mediation between concerns for melodic interplay between parts and a desire for consistency in consonance over the three phrases.

A similar organisational approach obtains beneath the duplum figure at y in Example 3.5. Once more, the tenor phrase labelled X is repeated down a tone in each of the following two phrases (albeit the third is slightly varied) so that a melodic outline of tenor moves in a
descending sequential movement from $c\#$-$b$ flat-$a$. Consonances between parts are maintained consistently as well: the first note of the duplum figure $y$ aligns to create a fourth with the tenor, and its final note produces a fifth – a behaviour preserved over every statement of $y$.

However, this careful co-ordination seems only to extend to the beginnings and endings of phrases in TANQUAM 4: at midpoints where tenor and duplum voices overlap, the harmonic relationship between parts betrays much greater flexibility. Indeed, it is at this point within phrases that significant moments of dissonance can be identified – the striking parallel motion in sevenths between parts, as highlighted in shaded boxes in Example 3.5, serves as perhaps the most extreme example. Inherent in the process of composing the duplum melody in this clausula it would seem, was an attempt to systematically uphold perfect consonances at the beginning and ending of phrases; in the middle of phrases however, it appears that there was freedom to handle material quite liberally, at least in terms of intervallic relationships between voices.

As such, on a structural level, though the duplum can be seen as closely bound to the design of the tenor, it was also able to sustain a degree of creative autonomy, implying a lesser concern with the harmonic consequences of its material than with melodic effect.

Cumulatively, the highly interactive melodic behaviours of voices in evidence within TANQUAM 4 point towards a compositional process for devising a duplum that is carefully interwoven with the design of its tenor. While the duplum bears the mark of sustained exploration with sequential movement most patently, it is a compositional technique that is supported – indeed, enabled – by the tenor, extending from the shared melodic vocabulary of the chant and the harmonic relationship between parts, to the specific rhythmic organisation of the tenor which, as has been demonstrated, is highly susceptible to sequential elaboration. The design of the duplum voice also suggests that its maker relied upon an intimate prior knowledge of the melisma not only to respond to, but also pre-empt melodic material heard in the tenor. Thus, the two parts appear to conspire together in order to realise the overall form of the clausula. In this way, the clausula provides a particularly pronounced example of the ways in which sequence can be explored throughout a setting; moreover, it demonstrates something of the extent to which this compositional behaviour becomes absorbed into the

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56 It is interesting to note, in this regard, that the continuation of the $y$ figure results in an unavoidable interval of a tritone between the $b$ flat of the tenor and the $e$ of the duplum. The implication is that the continuation of the repeated note duplum figure took precedence over notions of consonance at this moment.

57 This is an idea that will be considered in more detail below, at 203–207.
underlying conception of the setting, afforded as much by the clausula’s tenor as it is expounded by the duplum.

TANQUAM 8

Another setting of the TANQUAM melisma – an unicum in F (fol. 147v V) – that expands the frame of reference for compositional procedures in creating a duplum voice is presented in TANQUAM 8, shown in Example 3.6. It is a clausula that invites both analytical work to investigate how the repetition of melodic figures may be used as a tool for compositional elaboration within clausulae and a further consideration of how the recurrent use of such figures may be closely linked to the particular arrangement of the tenor melisma.

Example 3.6 TANQUAM 8, F fol. 147v V
The single compositional idea that forms the basis of the duplum voice in this clausula is a four-note figure, one long in length (labelled as \( x \)), that comes to be repeated insistently throughout the setting. It is an idea defined as much by its melodic identity as its rhythm. Constructed from a descending scalic unit, the melodic figure is consistently set according to the rhythmic design represented notationally by a coniunctura, shown in Example 3.7a.\(^{58}\) In nearly every instance, this single unit is repeated three times per phrase in the form presented in Example 3.7b. The economy with which this figure is used and strictly maintained in the clausula makes the compositional ambitions of its maker clear: in effect, TANQUAM 8 is a study – a ‘compositional étude’ – based upon the repetition of a single idea that has been tested out to an extreme degree.\(^ {59}\) Aside from the opening phrase of the setting which omits the figure entirely, just two instances of melodic divergence are to be found in the clausula. One, shown at \( y \) in Example 3.6, is the result of a plica introduced into the duplum that alters the descending figure so as to end on an \( f \) – a concern apparently motivated by the desire for a consonance on the final note of the phrase. The second instance is at \( z \): significantly here, while the melodic shape of the figure has been altered, the rhythmic profile remains the same. That is, it may have been the case that the rhythmic character of this figure was enough to enable listeners to recognise its use; once the repetition of a melodic idea was set up, a degree of divergence was possible within the framework of its established rhythmic and melodic identity.

**Example 3.7** Rhythm of melodic figures in TANQUAM 8

\[
\begin{align*}
\text{a)} & \quad \begin{array}{cccc}
\cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot
\end{array} \\
\text{b)} & \quad \begin{array}{ccccccccc}
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
\cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot
\end{array}
\end{align*}
\]

Writing upon such ‘compositional études’ Rebecca Baltzer has suggested that these concentrated examples of musical experimentation may serve the purpose of ‘mastering the rhythmic modes and the new kind of counterpoint they required’.\(^{60}\) She argues that such

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\(^{59}\) The notion of a ‘compositional étude’ is Rebecca Baltzer’s. See Baltzer, *Le magnus liber organi de Notre-Dame de Paris V*, xxxix.

\(^{60}\) *Ibid.*
situations are born out of the possibility for more artistic compositional decisions that do not require ‘any liturgical justification’, pointing towards the numerous possible functions and performance situations of a clausula setting. Baltzer’s underlying proposition that certain clausulae evince sustained exploration of a compositional idea is one with which I concur. But I would modify the claim that the motivation behind such settings lies in mastering the rhythmic modes. For in the case of TANQUAM 8, the brevity of the melodic figure – one long in length – arguably precludes a full expression of a rhythmic mode. Moreover, the rhythm represented by the coniunctura figure is certainly not limited to one particular modal design, but rather, may appear in multiple rhythmic situations – often denoted by a single orthographical figure. In fact, even within TANQUAM 8, the consistent notation of coniuncturae – formed of a square note with a tail followed by three isolated currentes – appears to imply three potentially different readings. These different forms, and possible rhythmic interpretations, are presented in Example 3.8.

Example 3.8  Different rhythmic interpretations of coniunctura figures in TANQUAM 8

On a theoretical level, therefore, while both voices of the clausula are governed by rhythmic patterns that may be categorised in terms of rhythmic modes, these modes only dictate the position of longs and breves; the evaluation and performance of smaller values is

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61 Ibid., xI–xli.
much less precisely specified. Smaller rhythmic values, such as those represented by coniuncturae, are governed by fewer theoretical rules and are thus subject to greater flexibility in their use. This all suggests that what is at stake in TANQUAM 8 is less in the service of the sort of technical or theoretical exercise implied by Baltzer’s statement than in the searching out of new possibilities for musical composition – that the purpose of such experimentation may be less restrictively characterised in terms of the musical working out (sometimes according to intensive procedures) of ways to perform the chant melisma.

The consistent restatement of the melodic figure, however, can be seen to impose particular compositional parameters upon the clausula that speak to a highly systematic process in the creation of the duplum voice. In this regard, the repetitive nature of the duplum not only appears to serve as a model for melodic design within the clausula, but it functions as a harmonic model as well, thereby controlling the relationship between the duplum and its tenor. For each statement of the melodic figure exhibits a pronounced affinity for certain perfect consonances that seem to govern its movement: the harmonic structure of the clausula is palpably articulated by its melodic design.

The first half of TANQUAM 8, shown in Example 3.9, demonstrates this point especially clearly. Here, once the melodic idea has been introduced in the second ordo, consonance between parts is strictly regulated. Over each of the tenor phrases – organised into a recurring four-note long pattern – only intervals of a perfect fifth and octave are sounded (in Example 3.9, fifths are shown in blue, octaves are in grey). The decision to select a fifth or an octave as the interval upon which to present the melodic figure in the duplum appears to have been guided by two principal factors. First, that the ‘contrapuntal idea’ dictating the placement of the duplum voice is closely linked to the melodic behaviour of the chant, with parts typically moving in parallel motion: the entire phrase at $x$, for example, traces the movement of the tenor melisma an octave above. A consideration of the vocal range of parts offers an additional rationale for the positioning of the duplum figure against the tenor, since in all but one of its statements, the opening of the figure is set within the limited range of a fifth, between $c$ and $g$. In turn, this restricted ambitus suggests that its creator attempted to prevent overlap of the duplum figure with the tenor – the only exception to this appears towards the end of the clausula, at the highest point of the chant melisma. Such compositional priorities, and the concomitant concern of ensuring perfect consonances in parallel with the tenor, would also account for the frequent disjunct intervals that arise moving between the end of one figure and the start of the next: even in the part of the
*clausula* presented in Example 3.9, one leap of a fourth, five fifths, and one sixth can be identified.

**Example 3.9** Opening of TANQUAM 8, F fol. 147v V

I argue, therefore, that whoever created the duplum voice of TANQUAM 8 was not only intimately familiar with the chant melisma, but that he sought to follow this tenor systematically throughout, using it as a harmonic anchor for the extensive repetition of his compositional idea in the upper part. Put another way, the repetitive use of a single melodic figure in the duplum can be seen to establish clearly defined parameters for polyphonic composition within the *clausula* – parameters that appear closely aligned with the melodic content of the tenor melisma. Furthermore, the readily transposable nature of the figure, and the fact that it has the rhythmic value equivalent to one tenor note, enables the potential for close imitation of the tenor. In this particular example, the extreme pre-occupation with repetition might thus appear to establish a compositional framework within the *clausula* that offers a way for singers to devise a duplum voice above this tenor.

Thus, the fixation upon a single idea, used consistently throughout the *clausula*, gives rise to a model for composition that connects the design of the upper voice with very specific ideas concerning consonance with the tenor. In so doing, the *clausula* presents a situation in which a compositional device can be seen to determine the harmonic structure of the whole setting. Such a compositional model deserves consideration for what it may say about the musical environment in which this *clausula* was made, for, whatever the literate situation, the
working out of this repetitive compositional scheme resonates quite distinctly with oral practices for elaborating upon a chant in polyphony. Indeed, it is easy to imagine that such a polyphonic design may be conceived entirely without recourse to writing – that the oral efficacy of this design is built upon specific structural parameters that may be adhered to simply through a knowledge of the chant melisma and a recognition of acceptable consonances between parts. To be sure, such an example does not discount the possibility of written modes of composition being used to achieve this design. That compositional techniques used consistently throughout a clausula cannot only be seen to provide the melodic inspiration for a setting, but a harmonic model for composition as well, however, offers an important starting point for considering the underlying musical processes that led to the creation of this setting.

**TANQUAM 7**

The clausula designated TANQUAM 7 (F fol. 147v III) has attracted only passing attention in scholarship to date. Where writers have examined the setting, few have attempted analytical work to understand the construction of its striking upper voice. Rudolf Flotzinger, for instance, offered a brief consideration of the setting to argue in general terms for a growing independence in the relationship between duplum voices and tenors traceable within the clausula repertory.\(^62\) Called upon to demonstrate a case for such independence, TANQUAM 7 is used as an example in which the duplum and tenor can be seen to break at different points from each other – in this clausula, Flotzinger suggests, the periodic structure of the duplum has been deliberately set against a contrasting tenor design.\(^63\) Rebecca Baltzer has also remarked upon TANQUAM 7 for the ‘melodically static’ nature of the duplum voice.\(^64\) But there is significant potential to look more closely at the compositional behaviours that underpin this setting for what they may communicate about the approach of singers responsible for its creation. As shall become clear, the overt fascination with multiple repetitions of the same pitch in TANQUAM 7 – in a way that seems categorically different to the kind of repetition outlined in the previous example – invites an investigation of this

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62 See Flotzinger, *Der Discantussatz*, 201.
64 Baltzer, ‘Notation, Rhythm, and Style’, 279.
compositional activity that foregrounds questions of melodic design, the perception of
structure, and of the sonic and visual impact of a setting invoked by its written form. In order
to answer such questions, I first turn to the clausula’s tenor design.

TANQUAM 7 arranges the notes of its chant melisma (shown in Example 3.10) into a
rhythmically measured pattern: the tenor divides up the pre-existent melody into three-note
phrases, punctuated with breaks one long in length, and renders those phrases in the fifth
rhythmic mode (see Example 3.12). The chant melisma is thus divided into thirteen equal
units (indicated by brackets in Example 3.10), with two final pitches treated as a purum
ending to the setting. Interestingly, however, the treatment of this chant melisma is markedly
different from its appearance in monophonic sources as Example 3.10 demonstrates. Two
sites of melodic divergence can be identified between the chant source and the clausula’s
tenor (marked x and y). The first, at x, reveals a discrepancy between the number of cs at this
moment in the chant melody – a common form of variant across polyphonic settings of the
melisma – while y illustrates an ending of the melisma that is unique to this clausula. At this
point, as compared to the chant source, two pitches of the melisma appear to have been
excised – an a and g after the syllable change to ‘-quam’ – that can be seen to fundamentally
alter the melodic shape of the melisma’s close. Rather than moving from a g on ‘-quam’
upwards to an a – as in all the other clausulae on this chant – the setting simply continues
down the scale to e.

Example 3.10  Comparison of TANQUAM melisma in BnF Lat. 15181, fol. 144v and
TANQUAM 7 tenor
This second adaptation has important structural implications for the setting. This is because its creator apparently had a different conception of the material with which he was working as compared to all other TANQUAM clausulae. Specifically, it would seem that a decision was made to end the clausula at the moment the tenor voice moves to ‘-quam’ and that all that was required after the syllable change was a purum ending to round off the setting: the omission of two pitches presented the simplest solution to achieve this plan. Put another way, the salient unit of material being set in polyphony here is not the entire melody associated with the word ‘tanquam’, but only the series of pitches upon its first syllable treated melismatically.\textsuperscript{65}

\textbf{Example 3.11} TANQUAM 7 tenor showing rhythmic arrangement and melodic structure

A similar flexibility in handling the chant melisma can be seen in the tenor’s rhythmic design. At first glance, the arrangement of the clausula’s tenor appears to uphold some aspects of the tripartite structure of the chant melody; the division between the end of the A’ section and the beginning of B is upheld by the rhythmic design of the tenor, as outlined in Example 3.11. Yet on closer examination, it appears that a consequence of the particular rhythmic arrangement of this tenor is that many of the internal repetitions inherent in the chant melisma are obscured by the division of the melody into groups of three notes. This is especially clear at the opening of the clausula: here, the rhythmic design not only obscures the large-scale repetitions between A and A’; it also eclipses all of the smaller repetitions of the figure outlined as x as well. For the creator of this clausula, then, the arrangement of the

\textsuperscript{65} This is an observation that can be traced throughout the repertory, though such a point is rarely stated explicitly in this way in existing scholarship. For other clausulae setting only the melismatic portion of the chant melisma, rather than a complete word, see, for instance, ‘REG[NAT]’ F, fol. 166’ VI, or ‘[AUDIVI]MUS’, fol. 153’ I.
tenor into a regular three-note pattern appears to have taken precedence over the articulation of any underlying melodic structures of the chant melisma.

What of the relationship between the organisational structure of the tenor and the clausula’s duplum design? Though one of the principal qualities of TANQUAM 7’s tenor is the way in which it masks the inherent repetitions of the pre-existent chant melody, it would appear that, in the upper voice, the opposite situation is the case; the duplum seeks to foreground repetitive melodic structures as the primary compositional idea of the setting. That the tenor has been arranged into this regular periodic pattern in a way that blurs the structure of the plainchant seems to facilitate the potential for the sustained exploration of melodic ideas in the upper voice – an affordance reflected in the close relationship between the phrase structure of the two parts.

Example 3.12  TANQUAM 7, F fol. 147v III

From the outset, the upper voice is monopolised by a single melodic idea based around an extended series of repeated notes in the third rhythmic mode (shown in Example 3.12). In the first phrase, the duplum places continued emphasis on a single e, repeating it ten times, before restating this idea immediately up a tone as the second phrase. And successive
repetitions in the following phrases continue this pattern: the third again shifts the repeated note idea up a tone, introducing a new melodic figure – a decoration of the previous idea – at the end of the phrase; this descending scalic gesture is marked as x in the example. This new figure gets swept up into the repetitive force of the setting and is used at the close of almost every subsequent phrase. It is only from the sixth duplum phrase (shown at A) that melodic material begins to deviate more significantly from this single-note idea.

In view of the level of melodic consistency in the upper voice, how might such moments of deviation from the repeated note idea be accounted for? One explanation would seem to be found in the harmonic relationship between parts in the setting. For the first and last notes of every duplum phrase consistently form a perfect consonance with the tenor below – typically, an interval of either an octave or a fifth. And this harmonic uniformity appears directly linked to the tenor’s rhythmic design. In multiple instances, pairs of tenor phrases have been arranged so that they begin and end on the same pitch: the first note of the opening tenor phrase (an a), for example, is the same as the final note of the second, and the third (b) is the same as the end of the fourth, thus maintaining the over-arching consonance of a fifth between parts. Such concerns for a consistent vertical relationship between the tenor and duplum might therefore account for the divergence from the melodic figure shown at x in the third phrase: arguably, the repeated note idea has been modified to follow the ending of the tenor phrase at the fifth. In addition, the more pronounced deviation from this idea at A again sees the duplum responding to the melodic contour of the tenor by shadowing the lower voice primarily at the fifth. Considered in this way, the duplum melody seems to reveal a dual concern in its melodic design, at once demonstrating a pre-occupation with exploring its repeated-note idea, while also adapting this idea to reflect fixed ideas of consonance in the setting.

Within this harmonic framework, however, the interaction between the two voices, and the resulting intervalllic relationship appears quite free. While perfect intervals are maintained on a broad scale, dissonance between parts can often be identified at the level of individual tenor groups, particularly at the mid-point of a duplum phrase (a similar behaviour was identified in TANQUAM 4, discussed above). For example, the second phrase of the duplum, labelled in Example 3.12 at y, reveals a relationship between voices that results in the interval of a seventh. The fact that this harmonic moment appears at the start of a tenor phrase, and moreover, that it is repeated directly in the subsequent phrase (labelled z) seems to give this dissonant moment particular prominence in the clausula. On one level, it could be
argued that, far from concealing these dissonant intervals, their clear audibility was deliberately conceived in order to draw attention to the extreme repetition of a single pitch and the compositional challenge associated with realising this melodic design. That is, the prominence of this twice-repeated dissonance highlights the melodic qualities of the monotone duplum idea, and as a result, illustrates the harmonic limits to which it is pushed. On another level, these instances provide evidence of a polyphonic situation in which the continuation of a melodic pattern appears to supersede considerations of consonance with the tenor; the organisational energy of the two voices is able to absorb a degree of dissonance between parts because of the distinctiveness of the duplum idea.

Reading the clausula this way, my argument can be seen to enter into productive dialogue with Catherine Bradley’s analysis of two REGNAT clausulae, in which it is posited that upper voice structures may not always be suggested by the underlying tenor melisma ‘but are achieved almost in spite of it’. Here, she suggests that the de-alignment of melodic repetitions in the chant resulting from the rhythmic patterning of the tenor may have been viewed as a compositional challenge for creators of clausulae to engineer their own structural schemes that forego any direct relationship with the tenor.66 For Bradley, the use of repetition ‘against the odds’ in the upper voice is indicative of the rich game-playing found across the clausula repertory.67 Building upon Bradley’s work, I wish here to pay closer analytical attention to the chant material used as the foundation of the setting. For while it is clear that, in the case of TANQUAM 7, the design of the upper voice does not correlate with the underlying structure of the chant, there were other properties of this chant that readily supported the extensive melodic repetition of the upper voice, and as far as was possible, these appear to have been drawn out of the chant melisma. Most notably, the rhythmic design of the tenor has resulted in pairs of tenor phrases that begin and end on the same pitch (or a pitch conducive to maintaining the melodic figure of the upper voice) – a design that seems to have been a calculated decision on the part of its maker, thus enabling duplum pitch repetitions in a manner that would not have been so possible if the repetitive structure of the chant had been maintained. Indeed, reformulating the melisma in such a way to support specific upper-voice designs may have been part of the skill of singers setting a chant in polyphony.

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66 Bradley, Polyphony in Medieval Paris, 90.
67 Ibid.
To a considerable degree, therefore, the tenor design of TANQUAM 7 appears carefully conceived to facilitate the particular design of the upper voice. Structural repetitions are not aligned in the two parts, but instead, certain qualities of the underlying chant have been brought out in a way that enables melodic exploration in the upper voice around a single pitch. While I share Bradley’s view that the insistent repetitions of the upper voice seem to go against the inherent properties of the chant, thus creating a compositional challenge for its creator, I argue that the affordance for this particular upper voice design is one embedded in the fundamental relationship between tenor and duplum – a reciprocity between the two parts that points to a unity of purpose. In spite of the dis-alignment of repetitive structures within the clausula, then, I would suggest that the particular rhythmic arrangement of the tenor has made it easier, not more challenging, for the extensive repeated figure to be applied throughout this clausula. The effect is to amplify the upper voice’s repetition by drawing on a wealth of underlying stylistic devices, deployed in order to support this kind of melodic construction.

The enthusiasm with which this clausula seems to test out its melodic idea may serve not only as an example of musical experimentation situated within the domain of singers and listeners, but as one that may have been apparent to readers and scribes as well. That is, the extreme repetition of a melodic figure distinguishes both how the clausula sounds and, significantly, how it looks on the page: the regularity of the notational orthography of this figure, shown in Example 3.13, reflects the persistence of the melodic idea. In consequence, I suggest that the eye is drawn to this clausula’s written form; a notational beacon that spotlights the melodic behaviour of the setting. For the copying of such extensive repetition leaves a trace on the page – a kind of ‘sonic afterglow’ of musical performance, as Emma Dillon has eloquently suggested – that seems more than a simple prescription of sound into note shapes. In addition, it appears to produce a visual effect – realised through the consistent orthographical tools of the scribe – that signals and replicates the compositional structure visually on the page in writing. At once, I propose, the scribe copying the clausula can be seen to be involved in prescriptive notational work, but also in capturing something of the compositional model of this piece which itself produces a visual cue as it is captured in

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68 On the association of the visual and the sonic within medieval manuscripts, see for example, Michael Camille, Image on the Edge: The Margins of Medieval Art (London, 1998), and also his essay, ‘Seeing and Reading: Some Visual Implications of Medieval Literacy and Illiteracy’, Art History 8 (1985), 26–49. For the most significant contribution to sound studies in medieval musicology, see Emma Dillon, The Sense of Sound: Musical Meaning in France, 1260–1330 (Oxford, 2012).

69 Dillon, Sense of Sound, 241.
written form. This, in turn, offers one way to consider how the writing down of music (even in manuscripts copied decades after this repertory may have been created) might still be involved in the animation of this musical practice.\(^70\)

**Example 3.13**  Manuscript image of *TANQUAM* 7, *F* fol. 147\(^{v}\) III showing notational detail

A further way that this *clausula* might be viewed at the intersection of oral experience and literate practice is in the particular notational issue presented by the melodic behaviour of the duplum. This is because the exploration of an idea based around multiple repetitions of a single pitch precludes the use of ligatures in its notation, and thus, the rhythmic implication of this pattern becomes difficult to convey. In such cases, Catherine Bradley has suggested that the singer who set out to create a duplum voice in this way may have also been aware of the written implications of his melodic idea – that the act of notating this music may have been a game in itself.\(^71\) Whether or not the act of making the *clausula* and its written form can be so closely aligned, it nonetheless seems that the scribe of *F* dealt deftly with the challenge posed by this setting. By differentiating between notes with tails and notes without at specific points, rhythmic information is supplied in a situation that would have otherwise

\(^70\) In mind here is Caroline Walker Bynum’s evocative proposition, in the context of medieval devotional practices, that ‘to materialize is to animate’; see ch. 2, ‘The Power of Objects’ in her book *Christian Materiality: An Essay on Religion in Late Medieval Europe* (New York, 2011), 125.

\(^71\) Bradley, *Polyphony in Medieval Paris*, 252.
rendered a modal reading difficult. The first phrase stands as a case in point. Here, tails can be identified on the first, fourth, seventh, and tenth note – the stresses of a third-mode pattern – making the rhythmic arrangement of the duplum clear. It is interesting to note, however, that this careful mensural clarification to mark repetitions is not maintained consistently throughout the setting: while it is nearly always the case that the first note and final note of an ordo receive a tail, the main rhythmic stresses of a third mode design within phrases are not consistently treated as notes with tails. Indeed, in the second ordo of the duplum, the scribe appears to notate a note with a tail on the fifth note of the phrase (shown at the arrow in Example 3.13) even though, in a third mode pattern, this note does not sound on a main stress – an orthographical decision plausibly explained here by the new system at this point in the clausula. More important than an observation that the scribe was less than uniform in his application of mensural forms onto simplex note shapes, however, is the identification that this type of rhythmic clarification was a possibility known and used by the scribe. This is especially significant when considering that its most discernible and consistent use was in the first phrase of the duplum, where rhythmic cues would have been most helpful to a reader. Above all, this clausula demonstrates an instance in which an upper voice pushes the notational limits of the modal system by exposing moments that may seem ambiguous in their expression of rhythm, calling upon the scribe to formulate an orthographic aid to facilitate their rhythmic reading.

**TANQUAM 6 AND TANQUAM 10**

While the examples treated above have demonstrated some of the ways a particular compositional idea may be extended and developed within a clausula, not every duplum voice of the TANQUAM family focuses in such a concentrated way on a single idea throughout the setting. It is these other pieces that shall now be considered. For though in some instances melodic figures may be repeated in ways that appear particularly thematised against the tenor voice, it would seem that other clausulae betray much greater flexibility in their approach to such materials, freely adapting them, and introducing new melodic ideas alongside them.

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72 Another especially clear example of mensural clarification to modal notation can be found in the clausula [ET CONFI]TEBOR, F fol. 173r II, in which the scribe makes use of stroke marks of differing lengths to signify long and short breaks between phrases.
What is more, the alternative picture afforded by the study of the more adaptable forms melodic materials may take on within a clausula can be seen to offer another entry point into a consideration of the musical habits of singers who created the repertory. For charting the use and reuse of shared (or similar) melodic figures in a range of different situations has the potential to uncover further information about the working processes of these singers and the kinds of possibilities for musical interaction between clausula settings.

That a closely related set of melodic figures form an essential part of the fabric of a polyphonic setting can be recognised particularly clearly in TANQUAM 6, presented in Example 3.14 – an unicum copied on fol. 147* II of F. Here, it seems that much of the material of the upper voice can be derived from the single opening phrase of the setting, marked x. But to clarify, it is not that the duplum bears evidence of a single technique used consistently to elaborate upon this material; rather it is that this melodic figure is continuously reworked against the changing harmonic basis of the tenor. This opening phrase – which itself seems to be an extension of the scalic movement introduced at the beginning of the chant melisma – is immediately taken up and varied. In the phrase that follows x, labelled y, for example, the melodic figure is altered so that its final note is no longer a repeated pitch, but a descending interval. Then follows an inversion of x (shown as X) which itself becomes the basis for melodic reformulation, varied in numerous different ways: for instance, it is repeated with an altered ending as X’, and an altered middle as X”. Still further melodic formulations can be traced that seem to relate back to the opening figure. This first phrase (x) is later condensed into the three-note long figure shown at xx, now directly invoking the three-note rising melody of the tenor phrase that follows, and the figure X” also melds into a descending scalic figure, shown at XX which is repeated at several points throughout the setting. The closer one looks, therefore, the greater the extent of this melodic reworking seems to be; there can be little doubt that the melodic materials used in this duplum are closely related to one another, and that these materials are being worked out over the course of the setting in contrasting ways.
The variation in melodic material of TANQUAM 6 seems, at least in part, to be caused by a desire for consonance between the two voices of the setting. One explanation for the change between the figures x and y in the first two phrases of the duplum, for example, is because of a motivation to finish each *ordo* at a perfect fifth with the tenor – in consequence, the final pitch of the second phrase descends to an f (rather than remaining on a g). Similarly, the variation between X and X’ may be accounted for by a concern for perfect consonance with the start of the tenor phrase; while the first statement of X finishes at the fifth, it must be altered at X’ in order to align with the tenor c. This type of melodic alteration begins to suggest that, within the context of the antiphonal structure of the *clausula* (where phrases alternate between tenor and duplum voices), the exploration of melodic materials in the duplum might be tailored to the melodic contours, and the resulting harmonic implications, of the tenor.
But at its root, the compositional motivation of this *clausula* appears to be based upon the exploration of closely linked melodic materials, and an interest in experimenting with these materials in different formulations. To be sure, part of the reasoning for the subtle variations in this upper voice seems linked to an awareness of the harmonic relationship the duplum voice will have with the tenor, and consequently, one finds a testing out of melodic figures against the changing harmonic affordances of phrases of the *TANQUAM* tenor. At the same time, the multiple permutations of these figures introduced in the duplum seem also to indicate a foundational aspect of this *clausula*’s composition, where small-scale melodic units – the building blocks of the duplum voice – come to be used as the melodic grist of upper voice design, subject to constant adaptation by singers. Variation among these melodic materials, therefore, seems to be precisely the point: the duplum figures used in this *clausula* present a myriad of possibilities for reworking, their inherent adaptability offering singers a range of options for any particular compositional moment.

Given this compositional basis, in which a limited set of melodic materials are being continuously developed and adapted by singers, might one begin to find evidence of similar musical reuse and reformulation on a wider scale, across different *clausula* settings? If so, how might this compositional approach be characterised? In answer to such a question, another *clausula*, *TANQUAM* 10, copied on the page of manuscript *F* which follows *TANQUAM* 6, offers a helpful point of comparison, for this setting represents a very similar instantiation of the underlying compositional plan. Viewed together, the two *clausulae* provide evidence not only of a shared approach to duplum design, but strikingly, of shared compositional frameworks for creating a setting as well – frameworks that come be inscribed with their own individual features. Example 3.15 presents a comparison of the two upper voices, using the same labelling of melodic figures as in Example 3.14. Like *TANQUAM* 6, the upper voice of *TANQUAM* 10 begins with an emphatic single-note opening. And from thereon in, identical melodic figures can be located throughout the two settings. *TANQUAM* 10’s duplum, for example, opens with the phrase labelled *y*, also common to *TANQUAM* 6, before introducing the descending scalar figure (**XX**) which comes to be restated at several transpositions later in the *clausula*. Just as in *TANQUAM* 6, the duplum of *TANQUAM* 10 appears to search out ways of reworking and reformulating these melodic figures; the result is subtly different to *TANQUAM* 6, however. The unit labelled as *z* in Example 3.15, for example, presents a new form of variant for the opening figure not heard in *TANQUAM* 6 and more generally, *TANQUAM* 10 is characterised by a higher tessitura. But much is the same. In fact, three instances of exact duplication of material between *clausulae*, labelled 1, 2, and 3, can also be
Example 3.15  Comparison of the upper voices of TANQUAM 6 and TANQUAM 10
identified. And even where differences between the specific melodic gestures can be
discerned, shared notions of consonance often still obtain between the two settings,
suggesting a similar harmonic model in each. The duplum voices of the two settings also
share the same pitch at the beginnings and endings of phrases in over half of cases; in the
remainder, a perfect consonance with the tenor is almost always supplied. One would be
tempted to conclude, therefore, that the two clausulae are interested in the same melodic
materials, and simply present two contrasting realisations of those materials. But more than
their use of related duplum material, the fact that notions of consonance, rhythmic design,
and phrase structure are also shared among settings suggests an even more fundamental
connection between the two clausulae, based on similar compositional decisions through
which singers realised their polyphonic design. The wholesale connection between the two
settings argues not only for a highly interconnected web of melodic ideas for constructing a
clausula, but a recognition of similar ways of structuring those ideas connected by means of
shared compositional designs.

In combination, TANQUAM 6 and TANQUAM 10 can be seen to neatly exemplify the
ways in which short melodic figures in the duplum voice may undergo intense reworking and
continuous transformation within a clausula setting. They draw attention to the manner in
which small melodic building blocks may be exploited according to similar compositional
strategies and speak to a singer’s awareness of other clausula settings on the same chant. Yet
what links the two settings is more than just a shared use of melodic figures: here, one also
finds common elements of design in the clausula that not only impact upon the formulation
of the upper voice, but on the organisation of the setting as a whole. In evidence, and
meriting further investigation, therefore, is an example of two clausulae espousing a shared
compositional aesthetic – one established upon a network of interrelated tools and techniques,
and an interest in creating new polyphonic settings by means of those tools.

BEYOND THE TANQUAM CLAUSULAE

Altogether, the range of approaches for creating a duplum voice above the TANQUAM
melisma documented within surviving manuscripts points toward a musical situation, at its
root, deeply focussed upon compositional invention. Indeed, this was a family of polyphonic
settings chosen here precisely because of the diversity of melodic behaviours to which it
bears witness. The ideas explored in each duplum voice, and the means by which they have been elaborated upon, resulted in remarkably contrasting compositional outcomes: each of the settings discussed above have presented their own distinctive responses to the same plainchant foundation that has in turn enabled the delineation of specific procedures for constructing an upper part. Cumulatively, I propose, they offer a snapshot of the musical techniques available to singers in this compositional process. And read this way, the TANQUAM family might be taken to represent in miniature something of the world of compositional possibilities within which a clausula was created: possibilities that can now be tracked across the whole repertory in order to understand their range of usages.

It may be argued, however, that the TANQUAM clausulae appear as particularly pronounced examples of upper voice behaviours with which I am concerned; that many of these settings are characterised by a special interest in the exploration of compositional ideas. Yet, I suggest that they are not so much cases of exceptionalism, but rather, of exceptionally clear examples of melodic behaviours used in the construction of an upper voice. Closer investigation of the clausula repertory will reveal how these behaviours were applied and adapted across different polyphonic situations; and how through their different appearances, a view of the diverse, though apparently related approaches underpinning clausula composition, may be brought into focus. I will attempt to demonstrate through my analyses that the melodic ideas identified above occupy an analytical space that precludes neat categorisation, and that compositional techniques were used with a high degree of flexibility. But with due care, attempts to identify particular ideas in their range of forms have the benefit of uncovering ways of making an upper voice that offer new insight into the fundamental processes of composition. Moreover, it is in recognising this flexibility of compositional practice that the possibility for significant musical interconnection can be observed, and perhaps more crucially, that a culture of musicianship – the human activity of musicians – may be most visibly discerned.

Another underlying concern to be addressed in the following part of this chapter is associated with the relationship between an upper voice and its tenor foundation and with questions of how melodic elements of the duplum fit against the pre-existent chant melisma in a discant polyphonic texture. Already, the TANQUAM examples have demonstrated the need to understand this relationship on a case by case basis, and that it is not always safe to assume that the rhythmic arrangement of the tenor pre-determines the content of the upper voice. It is in this light that I wish to propose a more interrelated (and less linear) association between
voices of some clausulae. For in recognising the possibility for compositional interaction between parts, a new reciprocal relationship between voices can be presented that offers revealing ways to understand procedures that underlie clausula composition. Viewing the compositional process in terms of the relation between voices in turn will highlight a wholly musical aspect of the repertory, concerned less with careful observance of liturgical melodies, and more with the formulation of upper voices as a means to explore new opportunities for polyphonic composition.

The following sections, then, are concerned with searching out how melodic behaviours identified within the TANQUAM clausula are used more broadly across the clausula repertory, and with how these behaviours may contribute to understanding of the habits of singers creating this music. As a springboard for this discussion, each of the behaviours drawn out of the TANQUAM settings above – melodic sequences, repetition, repeated-note patterns, and the use of compositional frameworks – will be considered in turn. In so doing, my aim is to expose the numerous possibilities available to creators of clausulae for fashioning an upper voice and to illustrate the highly interactive nature of such working practices.
3. MELODIC SEQUENCE IN DUPLUM DESIGN

One prolific melodic behaviour to be found across the surviving repertory of clausulae, and a starting point for my analysis, is the use of sequence. Taking on a vast range of forms – from quotidian descending figures formed of only a few pitches to large-scale designs that encompass an entire setting – it would seem that sequential ideas were often a rudimentary element of duplum design. Moreover, it appears that these ideas were subject to a high degree of flexibility in length, location, and the extent to which they may be taken up and experimented with in a clausula. On account of this melodic flexibility, as well as the sheer number of examples across the repertory, the use of sequence seems to have been a particularly valuable compositional tool in the construction of an upper voice, utilised by singers in a range of polyphonic situations. Indeed, while the earlier example of TANQUAM 4 introduced the possibility of extensive sequential development of melodic figures within a polyphonic setting, the picture that emerges from a consideration of the clausula repertory more broadly is one in which the use of sequence is highly diverse – where, between pieces, sequential melodic design offered abundant, and abundantly different ways of creating a duplum voice. Analysis of this melodic behaviour thus presents an excellent opportunity to investigate how particular compositional ideas may be utilised as a component of upper voice design, and crucially, how these ideas were tailored to specific polyphonic situations.

DESCRIBING MELODIC SEQUENCE

Before undertaking this analysis, however, the apparent range of uses for sequential ideas merits closer investigation, for it seems to be associated with several factors that cumulatively suggest a compositional situation marked by considerable variation and adaptation. Not only will this serve to lay methodological foundations for understanding what melodic materials are to be considered here – significantly, it is an issue that impacts on how one goes about an analysis as well.

73 While the focus of this section is directed towards melodic sequence as a means of demonstrating this adaptability, I suggest that this is a behaviour also traceable on a much larger scale and further study may well illuminate the scope of this practice.
The diversity of sequential ideas can be explained by the fundamentally different forms a melodic sequence may take on within a clausula. Most obviously, this is because a sequence may not only be used in the formulation of an individual melodic figure but also as a technique for developing that figure over several phrases in a setting. In some contexts, just one or other of these functions can be observed – a single phrase, for instance, may be constructed from a sequential idea, but not extended by means of sequence, or indeed vice versa. But both aspects of this premise may also be found together in a single passage, as Example 3.16 – a clausula from the organum setting of Alleluia V. Dies sanctificatus (M2) – neatly demonstrates. In this short section of discant upon the eight-note passage HODIE, one finds that the opening duplum phrase of the clausula, set above the first four tenor pitches of the word’s melody, is built around a sequence constituted of a three-note repeating figure that descends by step from \( d \) to \( a \). Here, therefore, is a situation in which the individual duplum melody is itself a sequential pattern. But the second phrase also makes use of sequence in a way that builds upon the melodic idea of the first, for the entire first phrase is now restated down a tone. The use of sequence in this instance has served to extend the initial melodic idea into a further, related phrase as well.

**Example 3.16** HODIE, \( F \) fol. 100v

\[
\begin{align*}
\text{HODIE} & \\
\text{HEC DIES} & \\
\text{HOC DIIS} & \quad [e]
\end{align*}
\]

Another factor contributing to the diversity of usages of sequential ideas is linked to the differing extents to which sequential melodic behaviours can be taken up and applied within a setting. In some cases, as in Example 3.17, the sequential development of an idea may become the primary means by which melodic material is explored in the upper voice. Striking in the sheer length that sequential repetition is sustained over the melisma, the clausula on the Easter Day Gradual HEC DIES (M13), demonstrates something of the extent to which one

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74 For one helpful definition of melodic sequence that articulates some of these forms, see William Drabkin, ‘Sequence (ii)’, Grove Music Online.
sequentially formulated melodic figure may be explored in a setting – here, every phrase is based on the sequential development of the opening duplum ordo. The second duplum phrase, for instance, presents an exact statement of the first, now down a tone, and indeed, every further phrase continues this stepwise descent so that, in toto, the clausula can be seen as based explicitly on a single sequential pattern.

Example 3.17  HEC [DIES], F fol. 173v VI

However, it is equally if not more common for the use of sequence to be but one of a number of compositional procedures identifiable within a clausula. One polyphonic setting that bears witness to such a phenomenon is presented in Example 3.18, on the melisma [SUR]GE from the Epiphany Gradual Omnes de Saba (M9). Here, the four-note rising figure (x) that opens the clausula is subject to a number of different reformulations. Two phrases later, for example, at y, it is presented in retrograde, and in the phrase that follows (x’), the ending is adapted in order to maintain a perfect interval with the tenor. Only then is the original x figure heard again, now extended through a rising sequence, first beginning on a c, before moving up a tone to d. Further still, the reworking of melodic ideas can be seen to continue over the second tenor statement: here, the retrograde figure (y) is stated once more and is then reshaped in the following phrase, down a tone, as y’, and then further adapted as y”. In sum, it is possible to see that several different means of experimenting with a melodic idea can be identified in a relatively short space of time – indeed, the coexistence of multiple melodic procedures seems to form the compositional fundament of the setting, enabling a limited set of ideas to be pushed in a number of different directions. This all points to the
contrasting approaches of singers in their uses of sequential melodic ideas. While sequential elaboration may be singled out by singers in a particularly pronounced way – as demonstrated by the HEC DIES clausula – in other situations, sequence was utilised as a common resource, one of many in the toolkit of a singer, that may be interpolated into the compositional process of formulating a duplum voice.

**Example 3.18**  [SUR]GE, F fol. 152v III

![Example 3.18](image)

It is also instructive to note that successive statements of a melodic idea that come to be extended through sequence may not always be exact repetitions but can be adapted while at the same time maintaining the character of that initial melodic form. A short, two-long melodic idea (x₁) presented in the clausula on the LATUS melisma (Example 3.19) bears witness to exactly this procedure. The figure itself outlines a scalar descent of a fourth, characterised by a repeated pitch at its opening and a plicated long at its close. In fact, x₁ and
Both present this figure exactly, in stepwise descent. However, \(x^3\) and \(x^4\) each embellish this sequentially developed melodic figure with rhythmic values shorter than the breve. At \(x^3\), the final plicated long is supplanted in favour of an ending that reaches a unison with the tenor \(g\) – a change that results in the four-note scalic descent being shifted back to the opening of the figure. The alteration of the starting pitch of \(x^4\) seems motivated by similar concerns for consonance. Here, instead of beginning the figure on a \(b\) as one might expect (thus continuing the established pattern where the opening pitch of the figure moves down by step at each sequential repetition), \(x^4\) starts on an \(a\) – an alteration necessitated by the \(a\) of the tenor melisma. The move to the anticipated \(b\), and the resulting four-note scalic descent, is maintained immediately after the \(a\), however, so that the overall melodic identity of the pattern is preserved despite the introduction of variation.

**Example 3.19**  **LATUS, W7 fol. 28r**

Additionally, the use of sequence may have been recognised as an attractive compositional technique because of the structural potential it offers in the construction of a duplum voice. Ideas of the structural role melodic figures may take on within *clausulae* have already featured in the work of several scholars including Rudolf Flotzinger, Fritz Reckow, Guillaume Gross and, more recently, Catherine Bradley, who have each highlighted ways in
which aspects of duplum melodies seem to be involved in shaping the formal design of settings.\textsuperscript{75} Their work has begun the task of examining the types of creative freedoms available to singers in the construction of upper voices that are far less bound to the formal organisation of the tenor melisma.\textsuperscript{76} But it would seem that there is a great deal more to be said about how an upper voice is able to draw out and express formal aspects of a setting, and how the use of sequence (as one of a number of compositional techniques) may offer a particularly clear way of achieving such formal objectives. In this regard, the use of sequential techniques in the duplum voice can be seen to present a range of new possibilities for articulating certain underlying properties of the chant since the introduction of a sequential melody within a setting relies, to a significant extent, on the particular consonant relationships established between voice parts. The implication is that singers were acutely aware of the compositional affordances presented by the rhythmic organisation of a tenor and the possibilities for introducing melodic procedures above these plainchant foundations.

Taking up this point, the first tenor cursus of a \textit{clausula} on the melisma \textit{ET CONFITEBOR} bears particularly clear witness to a reciprocal relationship between voices that enabled the integration of sequential ideas into the setting. Such compositional possibilities appear to have been facilitated by the specific melodic content and rhythmic design in the tenor (indicated by brackets in Example 3.20). For while the \textit{ET CONFITEBOR} melisma is formed of a ternary structure (\textbf{AA’B}), and though the three-note rhythmic pattern is maintained throughout the tenor, the second \textbf{A} section of the melisma can be seen to contain one fewer note than the first (shaded in the example).\textsuperscript{77} The result is that two different formulations of the \textbf{A} section of the melisma are made available in a single tenor cursus. And since the \textit{clausula} is premised upon an antiphonal interaction between voices (see Example 3.21 for a transcription), this difference takes on extra significance since it affects the pitches on which tenor phrases begin and end. Specifically, here, the rhythmic design of the first \textbf{A} section of the melisma can be seen to draw out note repetitions within the melisma at the junctures of tenor \textit{ordines}: all but the first phrase preserve a repeated pitch from the end of


\textsuperscript{76} In particular, see Bradley, \textit{Polyphony in Medieval Paris}, 86–91. The argument Bradley sets out here has been taken up for closer consideration at 179–180.

\textsuperscript{77} As noted above at 116, the majority of chant sources of this melisma tend also to preserve one fewer pitch in the second \textbf{A} section than in the first.
one rhythmic unit to the beginning of the next. The A' section, by contrast, introduces a number of larger melodic intervals at such moments – typically of a third or fourth.

**Example 3.20**  ET CONFITE[BOR] tenor, *F* fol. 152’ III (tenor *cursus* I)

In the first instance, the idea at \(x\), linking the end of one three-note tenor unit to the beginning of the next in Example 3.21, can be seen to rely upon the consistent note repetitions of the first part of the tenor melody in order to realise its sequential design. In this respect, the figure marked at \(x\) bridges the break in the tenor voice with a melodic idea moving from \(d\)-\(f\)-\(d\), so that parts begin and end together at the unison. And the two further statements of this figure (at \(x_1\) and \(x_2\)) preserve exactly the same sonority, first beginning on \(c\) and then \(a\) – the duplum closely tracking the contour of the tenor melisma below. But it would seem that this particular melodic design is to be viewed as more than simply a response to the rhythmic organisation of the tenor: importantly, the sequential repetition of this figure in the first part of the *clausula* can be seen to draw attention to this element of the tenor, spotlighting it as a prominent feature of the setting. By consistently maintaining unison intervals at the intersection of voices at each statement of the \(x\) figure, this underlying melodic characteristic of the melisma has been newly articulated by the design of duplum.
Later in the clausula, a new figure (y), formed of a falling coniunctura followed by a rising long is introduced in the duplum voice: this figure once again reflects the melodic outline of the chant melisma. This is because the tenor melisma at this point now includes a number of larger descending intervals that closely shadow the duplum’s melodic idea. The duplum’s movement from g to e at the figure y, for example, is matched in the tenor by an equivalent move from c to a. And further evidence of a consistent vertical relationship between parts can be located at each additional appearance (see y₁ and y²) where the ends of duplum phrases inevitably produce an interval of a fifth with the tenor. Lastly, the two sequential descending figures marked z and z₁ also appear contingent on certain intervals between parts. Outlining a scalar descent of a third, the two iterations of the figure dependably trace a movement from an octave to a fifth against the tenor. Here, therefore, is evidence of three situations in which the sequential development of figures is closely bound
to the particular harmonic relationship created between voices. Crucially, these melodic ideas appear to be directly connected to, indeed, facilitated by the rhythmic organisation of the tenor. The consequences of this are not only revealing in the support they lend to a more interconnected view of the relationship between tenor and duplum; they also present examples of the ways a duplum voice may amplify aspects of tenor melodies through its own formal design.

Together, the different manifestations of this melodic procedure all stand as evidence of the contrasting ways that singers used sequence in the formulation of a duplum voice. But the multiplicity of forms illustrated here already serves to complicate existing accounts of this creative process – especially those based upon formulaic models of melodic composition. For the tension born out of previous writers’ attempts to reconcile what appears to be the systematic use of melodic ideas in some *clausulae* on the one hand, and their proclivity towards variation on the other, results in a characterisation of the use of melodic ‘formulae’ requiring constant adjustment for each individual polyphonic situation.

At least in part, the difficulties encountered by scholars seem to stem from ideas of melodic composition based on the interpretation of one manuscript in particular, the Vatican Organum Treatise (*VOT*), and its relationship to surviving collections of *organa*. Preserving some thirty-one rules outlining note-against-note progressions between voices, as well as 343 examples of how such rules may be used to create a duplum melody, the treatise has been read by many commentators as a guide to polyphonic composition, to be memorised or studied by singers in order to facilitate the creation of *organum* settings. In this regard, Leo Treitler, in a 1983 article, examined the treatise from an oral-formulaic position, suggesting it is to be viewed as a practical manual ‘oriented entirely to the generative principles of ad hoc organum compositions’. Substantiating his claim by tracing the ways certain melodic figures present in the *VOT* were also used in Notre Dame *organa*, Treitler posited that formulae served as the building blocks of polyphonic activity, enabling singers to devise

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whole *organa* based on the combination of series of smaller melodic units. Dressed in similar language, Stephen Immel also argued that the *VOT* ‘is concerned with the function of formulae – whether they are introductory, thematic, transitional or cadential,’ though, in opposition to Treitler, he suggested that the primary purpose of the treatise is to facilitate ‘written composition based on written models’. To this end, Immel compared the melodic examples of the treatise to the *organa* that immediately follow, identifying numerous similarities between the two that argue for a structural ‘grammar’ underpinning duplum voices of the *organum* repertory. Anna Maria Busse Berger has taken this work further, attempting to reconstruct the compositional process by which two-part *organa* were made according to the rules of the Vatican Organum Treatise. She does this – in a similar way to Immel – by examining the duplum melody of the *Operibus sanctis organum* setting found in the treatise against the manuscript’s catalogue of melodic formulae. Noticing a great deal of overlap between the two, Busse Berger is drawn to the conclusion that ‘singers had a large supply of *colores* or formulas available in their mental inventory for every note-against-note progression that they could use in the process of performance and composition’. In other words, singers who had learnt and memorised melodic patterns for different harmonic progressions, as outlined in the *VOT*, could create a piece simply by assembling such melodic fragments together – quite literally, a process of composition by formula.

Several important methodological questions persist in these studies, however: perhaps the most prescient for this study are: at what point does a melodic idea gain the musical ‘quiddity’ to be labelled a ‘formula’? And on what notion of similitude and difference does one rely in order to distinguish between related formulae? One thoughtful attempt to answer such questions, and to think beyond the analytical formalism engendered by the identification of melodic formulae is presented in Edward Roesner’s ‘Who “Made” the *Magnus Liber*’.

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81 Immel, ‘The Vatican Organum Treatise Re-examined’, 166.
83 These are the *organa* for *Petre amas me* (O15), *Operibus sanctis* (O26), and *Sancte Germane* (O27).
86 By means of comparison, Jennifer Roth Burnette’s analysis of duplum melodies across a collection of *organa dupla* tends to view such upper voice formulae in much smaller melodic units, typically only a few notes in length; see ‘Organizing Scripture’, 227–252.
87 One implication of such formalist frameworks for analysis is the assumption that composers were equally concerned with notions of repetition, structure, and musical coherence – an approach that needs careful
Here, Roesner illustrates the possibility of variation and embellishment of ‘stock melodic formulae’, and suggests several specific case studies that appear to bear witness to ‘two alternative realisations of a single melodic profile’ – ‘two different workings out of the same melodic/harmonic strategy’. While still couched in structuralist terms, one of the significant values of this study is in demonstrating the possibility of a high degree of flexibility – for both singers and scribes – in the compositional process. Similarly, Susan Rankin, drawing on evidence of the adaptability of musical ideas in clausulae and motets in the Notre-Dame repertory, has also sought to build an image of this compositional situation coloured by ‘busy, highly interactive musical activity’. Through the careful analysis of two polyphonic settings in particular – based on the melismas MORS and LATUS – her point is to illustrate that singers had ‘a habit of re-working musical material, as and when that material was of interest, and in ways rendered necessary by circumstances’. Indeed, by taking such aspects of this methodology further, and by shifting the criteria for analysis away from melodic formulae and onto the musical techniques that underlie specific melodic figures, it will be possible to more fully appreciate the range of uses – and the potential for musical interconnections – to which a particular compositional strategy was subject.

Already, then, the examples presented above have illustrated some of the multiple forms a single compositional strategy may take within a clausula. Less ‘formulaic’, the different usages of sequential ideas testify to a more fluid, adaptable compositional situation – one subject to constant reworking and reinvention. In what follows, in order to describe and account for this diversity of upper voice behaviours in closer detail, I will now focus upon just one common sequential idea (what some commentators might describe as a ‘stock’ idea), following it through a range of applications. As shall become clear, the numerous different qualification. This is a point highlighted by Jennifer Saltzstein in her review of Catherine Bradley’s book, ‘Composing the Earliest Motets’, Early Music 47 (2019), 261–263, at 263.

88 Roesner, ‘Who “Made” the Magnus Liber?’, 245–246. Sometimes this variation is clearly linked to a written situation, indicative of the copying process of the scribe, while in other instances, Roesner demonstrates that melodic variation may be linked to the apparent reworking of an idea by singers.

89 For another study exploring the ways writing and copying may form a part of the process of composition, see Catherine A. Bradley, ‘Re-workings and Chronological Dynamics in a Thirteenth-Century Latin Motet Family’, Journal of Musicology 32 (2015), 153–97, at 168–84.


91 Ibid.

92 The notion of ‘stock’ melodic ideas is frequently used by Edward Roesner (see, for example, ‘Who “Made” the Magnus Liber?’) but has been taken up by several other commentators, including Jennifer Roth Burnette (see ‘Organizing Scripture’) and Catherine Bradley (ch. 3, Polyphony in Medieval Paris).
harmonic situations in which the idea occurs, its range of rhythmic identities, and its related melodic forms, serve to expand our frames of reference for polyphonic composition, offering new ways to understand possible melodic interconnections across the clausula repertory.

TRACING MELODIC SEQUENCES: AN EXAMPLE

While my chosen sequential idea takes on a number of forms across the clausula repertory, one especially clear example – at least on account of its extended use – can be found in the setting presented in Example 3.22, on the melisma REGNAT, from the Assumption chant Alleluia V. Hodie Maria (M34). The clausula itself is well studied: Rebecca Baltzer, for example, has remarked upon ‘an increased formal awareness’ in this setting, that sees each duplum phrase make ‘effective use of melodic repetition, variation, sequence, and rhythmic imitation’, and Norman Smith has compared its tenor melody to a number of other polyphonic settings on the melisma. Catherine Bradley, too, has looked at this clausula for what may be learnt about the relationship the setting has to its related motet. But while the highly organised structure of the upper voice is now well noted, little comment has been afforded to the particular melodic ideas presented within this setting – ideas that recur throughout the clausula repertory. As yet, no scholarship has sought to investigate their usage, and to question the significance of these repertory-wide interconnections.

The central idea is built from two repeated pitches that descend in stepwise motion, extending, typically, to outline the interval of a fourth. In this REGNAT clausula, the idea is presented at the very outset (x), though it quickly comes to dominate the melodic content of the entire setting. In the second phrase of the clausula, for instance, the entire idea is repeated in sequence, down a tone as x’. Then follows a slightly altered version of x – its opening now embellished with a short rising figure – shown as y, and this altered version is again extended through sequence (y’). Later in the setting, the two final phrases restate this idea on an even larger scale, spanning eight tenor pitches. First as z, then z’, the sequential idea now outlines a descent of a fifth (c-f), each leading to slightly different cadential moments.

93 For the Octave of the Assumption in a Parisian rite – on this, see Wright, Music and Ceremony, 201.
95 This is the motet Infidelem populum/REGNAT, see Bradley, Polyphony in Medieval Paris, ch. 3.
Example 3.22  REGNAT, F fol. 166\textsuperscript{r} VI

In several regards, the presentation of the sequential idea here highlights important issues associated with the identification and analysis of melodic behaviours of duplum voices more broadly. This is because, on one level, the use of sequence in this *clausula* seems striking and highly memorable: its creator appears to have recognised this melodic figure as an idea with the potential to be reformulated several times within the setting. Based around the sequential descent of two repeated pitches, the sonic identity of the figure would appear readily distinguishable. Such a point may go some way to explain the decision of Hans Tischler to include this sequential idea in his list of identifiable melodic figures in two-part Parisian *organa*, even if its specific presentation within the *REGNAT clausula* did not, for whatever reason, meet the criteria for inclusion.\textsuperscript{96} Yet, on another level, this idea might also be regarded as distinctly ordinary or quotidian in nature. Its short sequential design offers a relatively unelaborated means to descend by step over the course of a phrase and the workaday nature of the sequential movement seems, at its heart, quite conventional.\textsuperscript{97} In this

\textsuperscript{96} Tischler, *The Parisian Two-Part Organa*, formula no. 8, lxv.

\textsuperscript{97} This view of the musically conventional resonates closely with Nicholas Mathew and Mary Ann Smart’s call, in their essay ‘Elephants in the Music Room: The Future of Quirk Historicism’, *Representations* 132 (2015), 61–78, to pay closer analytical attention to such ‘quotidian’ features of a composition. They suggest that, through the analysis of ‘the patterns of small-scale repetition’ and the ‘expressive functions of the
regard, it may also have been conceived, simply, as a way of moving between points in a phrase, formulated within the style of numerous upper voice designs. And from this perspective, one might begin to account for the considerable malleability and adaptability of such ideas. For, as they are shared between singers and are set against different tenor melismas, their ever-changing nature becomes especially apparent, and the inter-relationship of melodic figures in this clausula is drawn into focus.

If, therefore, this particular sequential idea might be seen to fluctuate between the compositionally distinctive and the quotidian, what might be said of its application across the clausula repertory? Of course, it must be noted that certain compositional factors – not least, the particular tenor melody to be used, its rhythmic organisation, and its melodic profile – inevitably shape the ways singers may use this sequential idea within a clausula. But how, specifically, might these circumstances impact upon the application of this idea? Do differences in vertical consonance with the tenor, for example, influence its form? Furthermore, does this idea have a specific rhythmic or modal character as well as a melodic one – what of its appearances in different modal patterns? Finally, and perhaps most significantly, how might this figure be linked to others that appear to function in a similar way, suggestive of common approaches for formulating a duplum voice?

**HARMONIC RELATIONSHIPS**

First, to issues of consonance. Interestingly, while the melodic outline of the sequential idea appears to remain a distinguishable feature of many duplum voices, the attendant vertical relationships when set against tenor melismas seem to have been subject to significant variation. One exemplification of this harmonic diversity is presented in Example 3.23a which considers a small cross-section of witnesses among the clausula repertory, specifically looking at selected examples that begin at an octave interval with the tenor voice. Several preliminary observations seem worthy of remark. Most immediately, the harmonic differences between polyphonic settings in which this sequential idea appears suggest that its application was not limited to a specific intervalllic relationship with the chant melisma, or to chants of a particular melodic mode, but rather, was an idea that could be applied in a range of contexts. Workaday gestures that repeat with only minimal variation, one might ‘discover on this level of musical experience the kinds of attachments that weave music most tightly into social networks’, 73.
of tenor contexts. Four different melodic modal types are represented in the tenors of Example 3.23a, and the melodic contour of each is quite different: some, such as i) and vi) are primarily based around a single pitch; others, including ii) and iv) trace a descending movement, while iii) and v) each outline a rising melodic shape. Additionally, the sequential idea is set against these tenor melismas at a range of different pitch levels; from those high in tessitura to others that sit more centrally in range, it would appear that this idea was subject to numerous transpositions, reflecting a palpable flexibility in its application.

Significantly, these different settings bear witness to the contrasting harmonic interactions between tenor and duplum voices produced as the sequential idea was used within clausulae. Even in this small sample of settings, the ensuing intervallic relationships are remarkably diverse. In fact, every extract presented in Example 3.23a preserves a different intervallic relationship between voices. Comparing Examples 3.23a i) and ii) together, for example, reveals that after the octave consonance i) preserves two intervals of a fifth – the result of the sequential idea itself being slightly adapted, while, by contrast, the continuation of the sequential idea in ii) precipitates a parallel movement between voices at the sixth. Indeed, though it is often the case that when the sequential idea begins an octave apart from the tenor the ensuing movement is one of contrary motion, the specific vertical intervals that are produced are quite changeable. That noted, it appears just as possible for the duplum voice to maintain a parallel relationship with the tenor at the octave, as Examples 3.23a iii) and iv) indicate; in other words, it would seem that the most important principle determining the vertical relationship between this sequential idea and a tenor melisma is based simply on a desire for consonance between parts. The harmonic flexibility with which the duplum voices presented here all appear to operate argues for a situation in which this sequential compositional idea may be easily tailored to a range of polyphonic contexts.

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98 The chant melodies from which the melismas NOBIS, HEC DIES, and GLORIA are drawn are in mode II. LATUS is from a seventh mode melody, [VIR]GO a fourth, and ILLI a fifth mode.

99 Interestingly, I have found no example in which the vertical interval between voices is greater than an octave.
Example 3.23a  Selected appearances of the sequential idea beginning at an 8\textdegree against the tenor

i)  NOBIS, $F$ fol. 150\textdegree IV

\begin{figure}
\includegraphics[width=\textwidth]{nobis.png}
\end{figure}

iv)  HEC DIES, $F$ fol. 173\textdegree VI

\begin{figure}
\includegraphics[width=\textwidth]{hecdies.png}
\end{figure}

ii)  LATUS, $F$ fol. 158\textdegree II

\begin{figure}
\includegraphics[width=\textwidth]{latus.png}
\end{figure}

v)  ILLI, $F$ fol. 177\textdegree IV

\begin{figure}
\includegraphics[width=\textwidth]{illi.png}
\end{figure}

iii)  [VIR]GO, $F$ fol. 165\textdegree IV, 2

\begin{figure}
\includegraphics[width=\textwidth]{virgo.png}
\end{figure}

vi)  GLORIA, $F$ fol. 179\textdegree I, 2

\begin{figure}
\includegraphics[width=\textwidth]{gloria.png}
\end{figure}
Example 3.23b  Selected appearances of the sequential idea beginning at a 5th against the tenor

i)  DOMINUS, F fol. 150v VI

\[\begin{align*}
  &\text{\small Staff 1} \\
  &\text{\small Staff 2}
\end{align*}\]

iv)  VADO, F fol. 175v V

\[\begin{align*}
  &\text{\small Staff 1} \\
  &\text{\small Staff 2}
\end{align*}\]

ii)  IN VIRTUTE, F fol. 168v IV

\[\begin{align*}
  &\text{\small Staff 1} \\
  &\text{\small Staff 2}
\end{align*}\]

v)  CONTRITUS, F fol. 180v III, 3

\[\begin{align*}
  &\text{\small Staff 1} \\
  &\text{\small Staff 2}
\end{align*}\]

iii)  ET TENUERUNT, F fol. 171v I

\[\begin{align*}
  &\text{\small Staff 1} \\
  &\text{\small Staff 2}
\end{align*}\]

vi)  CELI, F fol. 182v I, 1

\[\begin{align*}
  &\text{\small Staff 1} \\
  &\text{\small Staff 2}
\end{align*}\]
A similar picture emerges from a consideration of selected clausulae that introduce this idea a fifth above the tenor melisma, shown in Example 3.23b. As in the previous example, each extract here preserves a slightly different vertical relationship with its tenor. And once more, the majority of extracts present contrary motion between voices moving from the first consonant interval to the second, as in Examples 3.23b i), iv), v), and vi), while the remainder maintain a parallel movement with the tenor.

Viewing all twelve extracts together, by far the most prevalent of consonances to be found across settings are the octave, unison, fifth and fourth, though the sixth and third are well represented as well; only one more dissonant interval, a second, can be identified (see Example 3.23a v).¹⁰⁰ But beyond this basic inclination towards more consonant intervals, the harmonic possibilities in setting this idea against a tenor chant appear quite free. That is to say, on a broad level, the kind of vertical intervals produced between voices suggests an implicit awareness of the harmonic implications of this sequential idea as it came to be set against tenor melismas: consonance would appear to be a guiding factor in its use. But perhaps more importantly than this, it seems that the idea’s widespread appeal lay in its ability to fit easily with a variety of tenor situations. I therefore propose that, as this idea was set against a plainchant tenor, it operated with an inherent malleability. In fact, the evidence set out here builds a case to suggest that a duplum idea may present multiple harmonic opportunities when set against a tenor, and this compositional freedom was regularly exploited by singers in formulating an upper voice.

RHYTHMIC AND MELODIC VARIATION

Considering the working-out of the sequential melodic idea as part of an ongoing compositional process in the clausula repertory, it is perhaps unsurprising that a proclivity towards variation can be traced throughout surviving collections. One aspect of this proclivity is manifested in its use across different rhythmic patterns. So far in this case study, this

¹⁰⁰ My notion of what constitutes a consonance and dissonance here takes its cue from the classification of consonant intervals by Johannes de Garlandia in chapter 10 of his treatise De mensurabili musica – on which, see Erich Reimer, Johannes de Garlandia: ‘De mensurabili musica’, 2 vols., Beihefte zum Archiv für Musikwissenschaft 10–11 (Wiesbaden, 1972). Here, Garlandia implies a spectrum between the most consonant intervals (unison and octave) to the most dissonant (semitone, tritone, and major 7th). For a succinct discussion of this, see Smith, ‘An Early Thirteenth-Century Motet’, 27.
sequential idea has been presented solely in a first mode context – each example drawn upon thus far has served to illustrate the differing ways the idea was used within this modal pattern. But several other rhythmic treatments can also be located across manuscript sources that begin to speak to singers’ interest in exploring and recasting this melodic idea across modal patterns.

Examples 3.24a and b present two further appearances of the sequential idea, copied in a second rhythmic mode and an extended first mode respectively. Interestingly, in each case, the fundamental character of the melodic material remains the same: each is constituted of repeated pitches that are extended through a sequential descending pattern. For Example 3.24a, a clausula on a portion of the Alleluia for Pentecost (M25), the melodic content, as well as the harmonic implications of the idea are essentially unchanged as compared to a first mode context. Since in a second mode pattern the scalar descent of the melodic figure still changes at a rate of longs, as x and y in the example indicate, the clausula presents the sequential idea in much the same form as a first mode setting.

Example 3.24a  PERLUSTRAVIT, F fol. 117v cursus I–II
In a similar vein, Example 3.24b can be seen to preserve the same general outline of the idea; in this extended first mode pattern, however, the number of repetitions upon individual pitches in the figure (shown at x) has increased from two to three. As a result, stepwise descending units of the idea now span the value of two longs rather than one – a stretching out of the idea as compared to its first and second mode forms. Yet in this example, the harmonic relationship between voices remains constant since the rhythmic arrangement of the tenor results in vertical intervals sounding only every other long, as the sequential idea moves down by step (highlighted in the example).

Viewed together, these contrasting rhythmic designs bear witness to the possibilities of reworking the sequential idea across rhythmic modes: they not only point towards a fascination with exploring this idea against multiple different tenor melismas; they also introduce the possibility that singers were able to play with the underlying rhythmic
characteristics of the idea. The implication is that the rhythmic identity of this sequential figure was not always stable; rather, it may be interpreted in a number of ways. That is to say, flexibility in the treatment of this idea not only enabled singers to call upon it in a range of different harmonic contexts, but it was also experimented with across rhythmic patterns as well. This is significant because the possibility of rhythmic adaptation reveals that melodic elements of the sequential idea may be separated from its rhythmic characteristics. As such, this sequential idea might be viewed less as a fixed melodic form and more ‘a way of doing things’, to be interpreted in contrasting ways in this creative process.

Viewing the sequential idea under such terms may also provide an explanation for the considerable melodic variation to which it is subject across the clausula repertory. The high degree of variation between appearances both within a setting and between multiple clausulae, supports the notion that the melodic quiddity of this idea lay just as much in outlining a general melodic movement as it did in the individual instantiations of that movement. But herein lies the analytical challenge. For the adaptability of this sequential idea complicates attempts to distinguish and categorise its appearance since one is immediately confronted with numerous subtly different forms that the idea may take on across the repertory. Yet, its ready adaptability points towards a more fundamental, and arguably more significant observation: these multiple different versions, I suggest, appear to illuminate a process of duplum composition based on shared approaches by singers. At its root, the range of forms taken by the sequential idea rather clearly demonstrates several contrasting ways of achieving the same overall melodic movement. Crucially, these different forms maintain certain characteristic features of the idea while at the same time evidencing a flexibility in their individual melodic ‘spellings’. Taking this hypothesis further, Example 3.25 introduces four extracts from clausulae, all within the fifth fascicle of F, that present subtly different versions of the same underlying melodic design. The purpose of this example is to demonstrate how differing interpretations of the same sequential idea may give rise to several closely related duplum melodies.

Speaking further to this point are the nineteen clausulae, preserved with versions in at least two of the three main sources of this repertory, in which the rhythmic mode of the setting has been notated differently between manuscripts – a phenomenon previous commentators have labelled ‘modal transmutation’. On this, see Friedrich Ludwig, Repertorium organorum recentioris et motetorum vetustissimi stilii, 2 vols. (Halle, 1910), i, 31; Luther Dittmer, Änderung der Grundrhythmen in den Notre-Dame-Handschriften’, Die Musikforschung 12 (1959), 392–405; Flotzinger, Der Discantussatz (in the section ‘Tenorgestaltung’); Baltzer, ‘Notation, Rhythm, and Style’ (in particular, see chapter 4).
Example 3.25  Interconnected ideas based around repeated pitches extended through sequence

a) **DOMINUS**, *F fol. 150r VI*

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\[ \text{Example 3.25} \]
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b) **ET TENUERUNT**, *F fol. 171r I*

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\[ \text{Example 3.25} \]
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c) **QUI TESTIMONIUM**, *F fol. 152r VI*

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\[ \text{Example 3.25} \]
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d) **HEC DIES**, *F fol. 155r I*

```
\[ \text{Example 3.25} \]
```

Importantly, what is being suggested here is that it is the melodic *idea* that lies behind individual instantiations of duplum voices that is significant; individual versions simply represent a manifestation of that underlying way of doing things. Thus, I propose that all four extracts can be seen to make use of the same essential idea. The first of these extracts, shown
in Example 3.25a, can be seen to offer the clearest example of a melodic line built from two repeated pitches that descend sequentially. The idea also underpins versions presented Example 3.25b and c, though in both cases the form it takes on is slightly more elaborate. Specifically, each extract can now be seen to make use of fractio modi as part of the sequential idea. In 3.25b – from the first cursus of an ET TENUERUNT clausula – this occurs at the end of the melodic figure, serving as a means to link melodic material above consecutive tenor ordines. In 3.25c, the beginning of the setting illustrates two forms that each contain embellishments over the third long: the first features a three-note descending figure, while the second, which now includes a plica, moves up by step (from a to b). Of course, many other forms of the sequential idea can be traced across the repertory and Example 3.25d illustrates one further means in which the end of the idea’s sequential pattern has been supplanted for an alternate rising close. In this clausula, the particular pre-occupation with pitch repetitions around a g appears to impact on the form of the melody. The duplum introduces a version of the idea over the syllable ‘di-[es]’ (highlighted above) that, as expected, descends from g to d, but its ending now turns upwards in order to return once more to g. Here, the salient character of the duplum idea based around this pitch seems to take priority over the sustained use of the sequential figure.

The connecting thread through these different examples can ultimately be distilled down to a series of descending units formed of repeated notes, with each extract offering a slightly different way of realising this idea against the tenor melisma. In turn, the evident relationship between these different forms raises questions of identity and difference – of what constitutes a melodic idea, and how one is to distinguish between different interpretations of it. In answer to such questions, the characteristic features of this sequential idea that can be seen to recur between extracts in the example begin to suggest that the four duplum melodies are best understood as based upon an identical melodic idea. And such a reading, that views the melodic idea being expressed in a duplum voice as equally important to the identity of its specific melodic form, argues for a new way to view the compositional process of devising an upper voice. For these various instantiations of a single idea in turn point towards a network of musical interactions – and the possibility of widely used compositional approaches, based on general melodic outlines – supporting the creation of an upper voice.

All told, the spectrum of uses for sequential melodic ideas appears especially diverse: the case study of a single sequentially derived idea has provided a rich illustration of the
different ways that singers created duplum voices from a limited set of melodic materials. The idea’s appearance in a range of rhythmic and melodic forms across the clausula repertory stands as testimony to the interrelated compositional behaviours that underpin this practice. And this highly interconnected approach to clausula composition – speaking, by extension, to the shared habits of singers – is illuminating for several reasons. Not least, it uncovers connections across the repertory, across multiple different chants for Mass and Office, and across manuscript collections, that emphasise the reliance of singers on shared approaches to composition. From a historiographical perspective, it has also brought to light many of the analytical problems presented by studying compositional behaviours in duplum voices. The seemingly limitless range of forms melodic ideas can be seen to manifest suggests that their use was often less melodically defined and discrete, their use far less ‘formulaic’ than existing scholarship has acknowledged. In fact, their malleability points much more towards a conception of this compositional process built upon highly adaptable means of moving between points in a phrase. This more flexible understanding of duplum design gives further voice to a compositional process built on similar ‘ways of doing things’, suggesting that a duplum idea can be conceived both as a specific melodic figure, and also, as representing a melodic movement that may be realised in different ways. Finally, the different potential uses of sequential ideas also highlight the new kind of interaction an upper voice may have with its tenor. Most discernibly, this can be seen in the inherent flexibility with which a duplum idea may be set against a chant melisma: it would seem that such ideas were able to be applied in multiple different situations that give rise to contrasting harmonic relationships. Far from a fixed and wholly determined contrapuntal framework in which a sequential idea may be formulated, the value of such melodic material may have been in the ability to tailor it to numerous polyphonic contexts. Nonetheless, it is clear that the notion of consonance was an important guide for singers in the creation of a duplum voice and in some cases, the particular arrangement of a clausula’s tenor can be seen to actively enable the exploration of sequential melodic ideas to be devised above it.
4. Repetition, Reuse, and Melodic Play

The potential for melodic ideas to exhibit a high degree of variation as they came to be explored by singers, both within an individual clausula, and across multiple settings, might now be viewed as something of a characteristic element of duplum design. Certainly, the examples of melodic sequence considered above, in which the same underlying idea could be traced across a range of different polyphonic situations, seemingly chameleonic in nature, sought to build the case for such an argument. But while the emphasis of this previous section was in illustrating the possibility for a highly flexible compositional situation, I wish now to consider another strategy for building a duplum voice that offers an opportunity to examine the melodic behaviours of upper voices from a different standpoint. That is, where the range of forms a sequential idea may take foregrounded the adaptability of duplum melodies and thus, the myriad of interconnections to be made across the repertory, in what follows, I seek to investigate the means by which clausulae focus upon, and play with, a single idea in their upper voices. Turning to repetition and, more generally, the sustained re-use of melodic material as compositional techniques for cultivating this play, the aim of my analysis is to uncover and explain some of the ways that creators of clausulae were able to experiment with their ideas, and to investigate how such compositional focus was achieved.

Of course, a compositional approach interested in exploring particular melodic figures within a setting – what I, taking my cue from several previous writers, have termed melodic play – has also been viewed as something of a ‘hallmark of the clausula genre’.102 The testing and tinkering with melodic possibilities, especially through the repetition of duplum ideas within a clausula, has been consistently viewed by commentators as a foundational element of the compositional process. Wulf Arlt offers one clear summary of this now commonly held view: ‘In [the collections of clausulae], the near systematic exploration of a broad spectrum of compositional procedures can be observed’;103 he continues: ‘the procedures include the most varied forms of repetition and variation, the sequencing and expansion of sections…’.104 That is to say, one of the ways in which scholarship has

103 Arlt, ‘Warum nur viermal?’, 44. ‘In [den Klausel-Sammlungen] läßt sich die geradezu systematische Exploration eines breiten Spektrums kompositorischer Verfahren beobachten…’.
104 Ibid., ‘[d]ie Verfahren schließen die verschiedensten Formen der Wiederholung und Veränderung, der Reihung und Ergänzung von Abschnitten ein…’.
characterised this repertory to date is in its apparent willingness to seek out compositional opportunities for melodic play in both tenor and duplum voices – and to do so in a highly methodical and sustained way.\textsuperscript{105}

**Example 3.26** PERHIBET, \textit{F} fol. 152\textsuperscript{v} I

Many \textit{clausulae} would provide excellent case studies in service of this description: a short setting on the melisma \textit{PERHIBET} offers one example (Example 3.26), illustrating how the sustained repetition of a melodic idea may be used to underpin the construction of an upper voice. In fact, the entire duplum appears structured around a single melodic figure stated in the opening phrase (marked \textit{x}). This figure is then repeated in the second phrase, its ending slightly varied to finish on an \textit{a} rather than a \textit{g} as before; in the third, the figure is repeated exactly as the opening. In the final, more extended duplum phrase, \textit{x} is significantly elaborated from four longs to eight longs, leading into a textbook closing gesture that brings the \textit{clausula} to an end. Simply put, the motivation behind the construction of this upper voice seems to be in seeing how far this single melodic figure can be pushed.

Such illustrative play within a \textit{clausula} as in the \textit{PERHIBET} example seems to highlight an important aspect of this compositional practice: the sustained interest in a particular melodic figure speaks to an enthusiasm to experiment with melodic design – an approach that appears central to the way this upper voice has been constructed. Historiographical readings

\textsuperscript{105} Speaking further to this point, Edward Roesner has also described \textit{clausula} settings as examples of ‘systematic explorations of the stylistic and formal possibilities inherent to discant’, ‘Notre Dame’, 862.
that seek to position this clausula within a culture of compositional creativity and invention, as Arlt and others have advocated, would not only be persuasive, therefore, but they would be well supported by manuscript witnesses. The extent of melodic play writ large across this repertory would seem to suggest that singers took to (re)shaping the musical fabric of this repertory many times over. That said, while it is clear that this characterisation fits neatly onto clausulae, such as PERHIBET, that present especially pronounced examples of melodic experimentation, I suggest – through an analysis of melodic repetition and re-use within clausula settings – that there is also a need to develop a more nuanced account of this compositional process that also considers clausulae that appear less ‘systematic’ in their exploration of melodic ideas.

One question to be asked given this methodological premise, therefore, is how the repetition and re-use of melodic ideas facilitates compositional experimentation and thus, how such play is achieved within a clausula. Further, if one element of this play manifests in what can be described as the thematised exploration of a melodic idea, a related question concerns how this compositional motivation can be supported by or be contingent upon other elements of clausula design. The analysis of settings that bear witness to the sustained exploration of particular duplum behaviours presents one means of answering these questions, offering concentrated examples in which singers test out their compositional ideas against a chant melody. The challenges and issues that can be identified in settings that draw upon repetition and re-use as the principal means of experimenting with a duplum melody not only shed light on the decisions of singers in such moments of composition, but provide a basis from which to explain such behaviours in other, less overtly thematised parts of the repertory as well. Building on the work of existing commentaries, this study seeks to broaden understandings of repetition as a compositional tool, for, while many clausulae bear witness to pronounced explorations of melodic materials, not every clausula setting can be described in such terms. By recognising this diversity, this study also attempts to expose a range of additional functions connected to the repetition and re-use of melodic material in order to examine how these different manifestations may also facilitate compositional invention.

The following investigation of melodic repetition is thus divided into three main areas of interest. The first focuses upon cases in which repetition has served as a basis for what previous commentators might label as ‘systematic’ experimentation with a melodic idea within a piece. I then turn to a clausula that draws upon repetition as a means of building a duplum melody but seems less systematic in its design, exploring how this setting engages
with its melodic material, and how the re-use of ideas can be situated within a broader category of musical experimentation. Finally, I consider clausulae where the general melodic profile and pitch content of the duplum, rather than a discrete musical figure, is taken up and explored within a setting. The purpose of this is to argue for the ways in which a consistency of melodic vocabulary, and the reuse and reformulation of this vocabulary, may be viewed as a related strategy for formulating a duplum voice.

PLAYING WITH MELODIC REPETITION

My starting point is a clausula copied in the middle of the fifth fascicle of F. VADO, from the Ascension chant Alleluia V. Non vos relinquam orphanos (M24), is a somewhat unusual clausula to find within surviving manuscripts, at least with regard to its tenor foundation. This is because this Ascension alleluia has a melody that receives only scant attention in sources, appearing as the basis for an organum only in F and, in a fragmentary form, in Silos. Moreover, the melisma VADO is found outside the context of an organum only once. In terms of its musical design, however, the VADO clausula is an ideal exemplum for melodic play within a setting, demonstrating how repetition may serve as a mechanism for exploiting a duplum idea against the changing possibilities of the tenor melisma.

The VADO clausula (shown in Example 3.27 both as it appears in F and as a transcription) most obviously exhibits its desire to experiment with melodic material because of its fixation upon two principal ideas which come to be reworked throughout the setting. Some preliminaries. The clausula is built on two statements of the fifteen-note VADO melisma; the first is set in irregular groupings of longs, while the second is arranged into a three-note recurring pattern in the fifth mode. Despite these different rhythmic arrangements, however, it would seem that the two-statement clausula was conceived of as a complete entity and is not a composite of two pre-existent single-statement settings. The most convincing argument in support of this view is the fact that the duplum melody overlaps

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106 The relatively sparse treatment of the chant in polyphony may be explained in part because of its use as the second alleluia of the Mass on the feast of the Ascension in the liturgy at Notre Dame, on which, see Wright, Music and Ceremony, 260. For a full list of polyphonic settings on this chant see van der Werf, Integrated Directory, 48–50.

107 The more elaborate melisma from the verse of this chant, ET GAUDEBIT, by contrast, receives a significant amount of attention in discant polyphony, with six distinct settings preserved across manuscripts.
across the end of one statement and the beginning of the next, but a number of melodic similarities (to be discussed), and a consistency in overall duplum design add further weight to this hypothesis. These musical consistencies considered, an additional aspect of the clausula that merits closer investigation is its notation, since a number of similarly ligated figures in the duplum appear to give rise to quite different rhythmic readings in each of the two tenor statements. The duplum at the end of the first tenor statement might serve as a case in point.

Here, boxed in the manuscript image, interpretative difficulties are encountered towards the end of the first half of the setting, at the coniunctura figure in the duplum voice. From this point until the end of the first tenor statement, several issues can be identified that suggest a less than straightforward process of copying on the part of the scribe. The coniunctura figure itself, for example, takes on a different rhythmic reading here as compared to other parts the clausula, equivalent to a single long rather than spanning two notes of the tenor melisma. (Such a reading is supported by the rhythmic arrangement of the tenor, and the fact that the following duplum pitch, an f, surely coincides with the tenor b flat.) The scribe’s indication of a tail on the duplum f following the coniunctura seems to offer clarification of a rhythmic reading at this moment, indicating a long to be set against the penultimate note of the tenor melisma. But this tenor note is itself marked by an unusually protracted spacing on the stave, most likely indicating a lengthening in rhythmic value and thus, a departure from the established rhythmic design of the tenor at this point. All of this, I propose, is a notational situation best read in retrospect, for the melodic content of the duplum here can be seen to correspond exactly to the closing figure at the very end of the clausula (highlighted in the transcription). What the scribe appears to be aware of and seeks to represent, it would seem, is a melodic consistency at the end of both tenor statements, though this consistency is not reflected in the notation. I thus propose that this point in the clausula illustrates a moment where the scribe is grappling with a moment of melodic play that he was not only aware of, but wished to preserve as he copied; that he recognised the musical similarities between both parts of the setting, but yet, in the process of copying, his (less than consistent) notational response was modulated by the specific rhythmic situations of the two different tenor statements. As a result, such a moment seems to illustrate quite

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108 As Edward Roesner has suggested, the scribe of F was most probably ‘intimately familiar with this music and its sounding tradition’, Introduction to the ‘Notre-Dame Manuscript’ F, 15. John Haines observes similar agency at work within troubadour and trouvère manuscripts, suggesting that some scribes read and recognised
succinctly the ways that such melodic play may shift across written and unwritten domains, and moreover, to highlight the potential significance of notation as a means of preserving (and even of emphasising) instances of repetition.¹⁰⁹

Example 3.27  VADO, F fol. 175r V, manuscript image and transcription

¹⁰⁹ This resonates with Roesner’s suggestion that the interacting work of composers, scribes, and performers not only served a ‘recreative function’ in sustaining the repertory, but they also played a ‘creative role’ in reinventing and recasting pieces in order to explore new compositional possibilities. See Roesner, ‘Who “Made” the Magnus Liber?’, 234.
The first melodic idea to be explored in the duplum voice is stated at the very opening of the piece (x in the transcription). Beginning on d, the idea is based on a sequential design that outlines a descent of a fourth – a shape that is identifiable at every further appearance. In the second phrase, the same sequential design is stated once more (x\(^1\)), still outlining a movement from d to a but with slight variation in detail, so that the final three pitches now descend to a g before arriving on the final note. Significantly too, the harmonic relationship between the duplum and tenor has also changed. In the first phrase, the move was from an octave interval to a unison, while in the second phrase, a completely different harmonic movement is identifiable, with voices now beginning at a fifth and ending a third apart. The third statement of this idea (x\(^2\)) once more opens with exactly the same melodic material but now radically extends this figure from four longs in length to span the remaining seven pitches of the tenor melisma, coming to a close at the beginning of the new tenor statement. This extension has been achieved with two considerations in mind, it would seem. The first is an inclination to preserve as far as possible the figure that has preoccupied the duplum thus far. Second, it would appear that the creator of this clausula was also motivated by a desire to devise material at the end of the phrase that may be used in the same place at the close of the second tenor statement as well – that is, a desire to create a melodic symmetry between two equivalent parts of this clausula’s overall design.

A new idea is then introduced over the second tenor statement of the clausula, shown at y, which, like the figure x, is extended through a number of repetitions. Serving as a melodic bridge between the end of one tenor phrase and the beginning of the next, this duplum idea can be characterised by a single long followed by a three-note rising figure. But as it comes to be repeated in the phrases that follow, it is adapted slightly (see y\(^1\) and y\(^2\)) so that this ascending idea is no longer in conjunct motion but introduces the interval of a rising third. The rationale behind this reformulation seems to be in the introduction of another idea that becomes attached to y\(^1\) – a four-note descending figure represented by a coniunctura (z) – which is then repeated in sequence immediately after.

What, then, can be said of the way this clausula focuses upon and tests out its melodic ideas? How might the features of this melodic play be characterised? A closer look at how individual melodic figures are explored in this clausula reveals several important features underlying the process of composition that shed light on some of the strategies available to singers in their exploration of duplum materials. The first of these is the inclination towards testing out the same melodic figure over changing harmonic implications of the tenor.
melisma. That is to say, each of the ideas presented in the VADO clausula exhibits a proclivity towards exploring the contrapuntal possibilities offered through their repetition against contrasting melodic profiles of tenor ordines. One seemingly foundational characteristic of this setting – a calling card, perhaps, for more thematised examples of duplum design – lies in a motivation to experiment with the harmonic consequences of this repetition, and thus to frame these ideas in new ways. By implication, it would seem that a flexibility in handling these materials as they come to be unfolded over the course of a clausula was an inherent part of this compositional process. Indeed, part of the skill of singers formulating a duplum melody presumably lay in being able to adapt melodic ideas to sit in a range of tenor situations.

Another characteristic of this setting, and one of the reasons why the VADO clausula appears to play with its material in an extreme way is because the entire content of the duplum voice can be seen to relate quite explicitly to two principal figures. On one level, the clausula demonstrates how this repetition may be conceived of and traced linearly, from phrase to phrase. But an engagement with duplum materials can also be discerned on a larger scale. Specifically in this instance, the endings of the two statements of the tenor melisma have been paired with exactly the same melodic material and it would seem that its creator recognised the possibility for repetition at similar structural moments in the piece. Evidence of melodic play within this clausula, therefore, is not only precipitated through the continuous reworking of ideas: connections may also be drawn between analogous moments in a clausula’s overall form. The re-use of duplum materials in this way points to a further aspect underlining the design of the upper voice, as a means of creating a sense of structure from the consistent repetition of melodic ideas. This suggests that the testing out of materials in the upper voice is to be viewed as more than a surface-level ‘gloss’ upon a pre-existent tenor melody; rather, it should be conceived of on a basic organisational level as well, as a structure created by two voices.

One additional consideration that appears to shape the ways in which singers explored melodic ideas within the VADO clausula is in seeking to maintain the recognisability of such figures across their various reformulations. That is, in order to create a sense of melodic familiarity, and to ensure this melodic experimentation may be heard, certain distinguishing qualities of a figure appear to be repeated explicitly throughout its appearances. In the VADO example, though the first melodic idea (x) is constantly adapted as it comes to be set against different portions of the tenor melisma, the first five notes of the idea are unfailingly stated
exactly at each repetition. A crucial aspect of playing with this melodic idea and making such play recognisable seems to be in the need to maintain aspects of its melodic identity – the preservation of the opening portion of this idea in the face of its continuous variation has served as a means of marking out the compositional premise of this clausula.

Given the multivalence of these features, it would appear that strategies for experimenting with duplum materials are not easily distilled into a neat set of compositional instructions. Rather, the kinds of compositional decisions made in order to achieve the highly systematic melodic design of this clausula appear woven into the fabric of the clausula’s structure, traceable on a number of compositional levels. At the same time, the preoccupation with specific melodic figures can be seen to create certain compositional preconditions that come to determine aspects of the clausula’s design, not least, a phrase structure and notions of consonance between voices. In a repertory renowned for its highly controlled use of materials, the pronounced repetition of melodic ideas might thus be seen to impose several fixed parameters onto a setting as a means of achieving sustained focus in its duplum design. In the case of VADO, the degree and extent to which this repetition dominates the content of the upper voice characterises the clausula as a marked example of systematic play. But rather than serving simply to reiterate prevailing conceptions of clausulae as ‘playing’ with melodic materials, this example has demonstrated that multiple compositional strategies lie behind such a stylised design. Thus, while evocations of musical play within a clausula setting can certainly be seen to describe a particular compositional outcome, the processes by which this play is achieved may by numerous and necessitate deeper investigation.

CONTEXTUALISING MELODIC REPETITION

Not every clausula bears witness to the repetition and reuse of melodic ideas in such a marked way. In many cases, instances of melodic repetition can be identified on less all-encompassing terms than that found in the VADO clausula, as but one of several strategies drawn upon by singers for building a duplum melody. This is not to say, however, that such clausulae are less interested in the sustained exploration of melodic ideas; a desire to test out and play with musical materials may often form the basis of duplum design without the need for constant repetition or reuse of melodic figures. To this end, in my next example, I wish to
illustrate some other ways in which singers can also be seen to play with their melodic material in the compositional process; where techniques including repetition are best read within a broader, more adaptable compositional situation, in partnership with a number of other melody-building techniques.

The clausula presented in Example 3.28 is a setting based upon a portion of the Alleluia for Easter Day (V. Pascha nostrum), LATUS EST; it survives both within F, where it is copied as one of eleven clausulae upon this melisma in the manuscript’s fifth fascicle, and in the second collection of clausulae in W.1 The setting certainly bears the hallmarks of melodic repetition in the formulation of its duplum, though unlike the VADO example, it constitutes one of several techniques for testing out melodic ideas throughout the setting. Indeed, this clausula seems to be characterised by a particularly flexible compositional approach to duplum design, marked by areas that betray both greater and lesser susceptibility to repetitive upper voice ideas – an approach that points towards a creative freedom in the interpolation of melodic figures and the existence of moments that present more conspicuous opportunities for melodic experimentation in the clausula.

One measure of the clausula duplum’s greater flexibility in melodic design is its highly adaptable phrase structure – phrases within the setting range from just three longs to thirteen longs in length. This range, and the resulting variability in melodic design, might be read as indicative of the diversity of compositional strategies for constructing this duplum voice. The closer one looks, however, the more evidence of repetition and re-use of a small group of melodic figures one can find within the setting.

The cornerstone of this duplum material, and the basis for much that follows, can be traced back to the very opening of the setting, and the four-note figure x that charts a scalic ascent from c to f. This is a melodic figure that comes to be reused in a number of different ways. The most obvious example of a sustained interest in it can be located at the two exact restatements of the x figure later on in the duplum, shown at x₁ and x₂. But repetitions of x are not only limited to appearances in isolated phrases within the setting: several further statements of this figure can be identified at the beginnings and ends of larger duplum phrases (all marked x in the example) – for instance, at the end of the second ordo. And in

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110 This is the clausula on fol. 57r III of W₁. For one recent study of settings of this melisma, see Susan Rankin ‘Making Music into History’ in Sounding the Past.
Example 3.28  LATUS EST, F, fol. 157v V
one further case, towards the end of the setting, the scalar figure can be seen to bookend the melodic material of a phrase. This duplum figure also has a direct relationship with the underlying chant melisma on which it is set; it appears that this idea is not only woven into the fabric of the upper voice, but it mirrors the melodic contours of the tenor as well. This is because an exact corollary of the opening idea (x) is also located within the chant melisma, shown in dashed boxes at both its appearances in the example. The audible similarities between melodic units of both voices suggest a sophisticated level of re-use within the setting that might already serve to broaden notions of play and repetitions to include the melodic relationships discernible in the chant melisma and the upper voice.

Other instances of the duplum voice testing out of melodic ideas are also identifiable, offering further examples of localised repetition within the setting. The lengthy second phrase of the duplum, y, for instance, is restated nearly verbatim in the phrase that immediately follows (only the final pitch has been altered, in order to create a consonance with the tenor at this point). Striking in the length of repetition, this phrase is notable because it is made to fit against two starkly contrasting tenor situations, resulting in an unavoidable interval of a tritone (highlighted in red) at its first appearance – perhaps an example of a compositional compromise taken by singers in order to achieve this duplum design. But portions of this extended idea are also drawn upon later in the duplum voice: the section of y boxed in the example is restated once more at the join between the first and second statements of the tenor melisma. At the least, this moment serves to illustrate the contrasting layers over which melodic repetition may be in operation: it is not only short, easily adapted figures that are subject to constant re-use; longer, more complex cases of repetition, and the fragmentation of previously stated ideas can also be identified within a setting as well.

This clausula’s duplum can thus be seen to draw upon a number of different forms of repetition and re-use as a strategy for melodic design. But while repetition is used as a central tool for expanding upon existing ideas within the clausula, it is also employed as a means of introducing new melodic materials within the duplum voice as well. A case in point may be found at z in the example. Here, the opening of the phrase can be seen to imitate the duplum idea first heard at y (moving from e-d-e-f). Immediately following this repetition, however, a new, unrelated melodic figure is introduced – a short, descending scale from f to c; the initial restatement of the previous idea has now been drawn upon as a means of presenting a melodically contrasting figure. Reading this addition in terms of compositional process, the restatement of existing melodic figures shown in this example has provided an opportunity to insert new material into the duplum voice. Not only a strategy for cultivating melodic
familiarity therefore, repetition might also be regarded as a means of introducing melodic diversity and difference into a setting as well.

Examples of melodic repetition and reuse such as are found in the LATUS EST clausula, therefore, contrast quite distinctly from the VADO setting presented above: unlike VADO, repetition cannot be described as the defining element of this upper voice, and not every duplum phrase directly relates to a previously stated melodic idea. The process of composing this upper voice instead seems far more fluid: the nature of repetition and reuse in the LATUS EST clausula appears to span multiple compositional layers, incorporating new melodic material with old, and drawing inspiration from the melodic contours of the chant. The means by which duplum ideas are explored in this clausula does not seem to fit particularly well with characterisations of play based on the systematic exploration of melodic material. What arises from this example instead is a more diverse reflection of the strategies available to singers for building a duplum melody and extending this melody over the course of a tenor melisma. The concerted exploration of ideas still forms a central premise of the LATUS EST clausula’s design, then, but the spectrum of uses for repetition identified argues for a greater nuance in descriptions that seek to understand how such melodic experimentation may be achieved.

OTHER FORMS OF MELODIC REPETITION

As suggested above, when scholars have written about clausulae apparently concerned with testing out particular melodic ideas in their upper voices, they have primarily considered settings that bear witness to especially pronounced examples of melodic play. Understandably so, for it is in those clausulae that arguments for the existence of such compositional motivations are most convincingly made. The final examples of this section, however, now seek to expand the ways in which one may interpret this melodic play by considering two clausulae that demonstrate a consistency in the melodic material used throughout, yet whose duplum voices do not make use of repetition in any literal form. The aim of this is to think more carefully about clausulae that are less obvious examples of compositional experimentation, asking how these settings may also offer pronounced reflections on their melodic material.
One helpful approach in view of this hypothesis can be traced through the analytical work of Catherine Bradley in her study of two REGNAT clausulae. These settings (REG[NAT] 6, F fol. 166r V, and REG[NAT] 8 F fol. 166r VI) are notable for their explicit re-use of material – indeed Bradley comes to characterise the clausulae by ‘insistent upper-voice repetitions’, suggesting that they are indicative of a culture of ‘compositional game-playing’ in the exploration of particular ideas over the changing harmonic possibilities of the tenor.\footnote{Bradley, Polyphony in Medieval Paris, 89, then 90.} In view of the striking use of repetition in these clausulae – where every phrase can be seen to repeat, re-use or reformulate the same set of ideas – Bradley also remarks upon what she describes as an ‘economy’ of melodic design within each upper voice.\footnote{Ibid., 89.} This is because duplum phrases within the two REGNAT clausulae appear to closely resemble one another, with each drawing upon a very similar melodic profile. Exact repetitions within the settings can be seen to place continued emphasis on the same melodic materials in the duplum voice, and more fundamentally, almost every phrase within the clausulae reveals a likeness in pitch content and overall shape. Drawing upon this notion of a melodic ‘economy’ of design, I want to propose that this same sense of focus upon particular melodic materials might also be discernible in clausulae that are less overt in their use of repetition. Close readings of my chosen clausula examples thus seek to underline some of the means by which singers may play with a melodic consistency of duplum ideas in order to place renewed emphasis upon certain features of their compositional design.

Example 3.29  MARIA VIRGO F, fol. 171v V, 2

\footnote{Bradley, Polyphony in Medieval Paris, 89, then 90.}
\footnote{Ibid., 89.}
The *clausula* MARIA VIRGO, from *Alleluia V. Hodie Maria* (M34), would seem to be an inviting test case for such a hypothesis. At first glance, no exact repetition of duplum phrases can be identified within the setting. But on closer inspection, the duplum follows a singular melodic profile that can be charted throughout the setting, speaking to a duplum design deeply immersed in the re-use of material. The act of melodic composition in this *clausula* seems as much based on continuous invention and the exploration of new melodic figures as it is on an awareness of what has come before.

The *clausula* itself (shown in Example 3.29) is simply constructed: its fourteen-note tenor has been set in a continuous stream of double longs; the only explicit break identifiable in the setting is between the two words of the melisma: ‘Maria’ and ‘virgo’. Above this, the duplum is organised into short phrases that correspond to the length of two tenor notes – only at the longer melismatic portion of the chant at ‘[vir-]go’ does this structure break down, and the duplum continues unabated to the end of the setting. Considering the melodic profile of this upper voice, a remarkable consistency in material can be discerned – a feature that seems enabled by the periodic structure of this upper voice. Over the first word, ‘Maria’, there is a particular focus around $d$: the first two phrases each begin on this note, and the overall trajectory of the chant melisma (beginning and ending on $d$) is replicated in the design of the upper voice. But on a more detailed level still, an economy of design becomes a defining characteristic of this duplum, and the first phrase – beginning on $d$ and moving to three breves on the second long (boxed in the example) – can be taken as a model for the rest of the *clausula*. In the second phrase, its melodic content is adapted, but the same overall movement and rhythmic design can be recognised. From ‘vir-’, the same design is stated four more times, first starting on $e$, leading to three breves (consistently notated with a *plica*), and returning to $d$ on ‘-go’.\footnote{This ‘economy’ in melodic design is also reflected in the consistency of notation in this *clausula*, with phrases preserving a *plica* at each iteration. Indeed, one aspect arising from this study, requiring further investigation, is the level of notational uniformity to be found across different *clausula* settings, and among different manuscript witnesses, that make use of the same melodic materials.} In other words, the premise of this *clausula* appears to be in playing with a short melodic figure, and it would seem that the creator of this *clausula* drew upon characteristics of this figure, its rhythmic and melodic profile, and its pitch content, in order to construct the entire duplum voice.

A similar concern for melodic consistency can be identified in another *clausula*, [AUDIVI]MUS, shown in Example 3.30, where once more, small but salient units of melody are restated throughout the setting. Together, these *clausulae* begin to illuminate how less...
melodically fixed elements of a duplum voice may come to be re-used and emphasised within a setting. Specifically here, it is not the exact pitch content of the duplum that comes to be repeated but rather its melodic profile. In the first instance (shown at x), this general melodic shape, set in a first mode pattern, outlines a move from d-f-d, in contrary motion to the underlying chant melisma. But in the phrases that follow, this shape can be heard at numerous transpositions, and in slightly adapted forms. At x¹ and x², for example, the same profile and contrapuntal relationship to the chant melisma can be identified, establishing a sense of melodic continuity – in the teasing out of a single idea – throughout the setting. Later in the clausula, though this general melodic outline can be recognised as a common way of beginning a duplum phrase, it is subject to much greater variation. At x³, for example,
the final pitch of this five-note figure is altered from a c to an e (perhaps to create a fifth against the tenor melisma at this point), and similarly, x⁴, and x⁵ each demarcate a rise and fall, but the pitch content of each is subtly adapted; finally, at x⁶, the initial x figure is presented in inversion.

The melodic similarity of duplum phrases throughout this clausula, and the resulting economy of material underpinning the upper voice, illustrates a further instance of singers testing out melodic materials over the course of a setting. The constant variation to which the opening melodic figure is subject suggests that it is the general melodic shape of the idea, coupled with a fixed rhythmic profile – rather than a specific melodic form – that becomes the defining feature of this duplum design. That is to say, repetition and re-use are once again central to the formulation of this clausula’s upper voice, but the manner by which this is achieved is less orientated towards exact repetition of a melodic figure and more concerned with the exploration of a melodic and rhythmic outline. Just as in the MARIA VIRGO example, therefore, this clausula demonstrates how singers were able to draw on a consistent melodic vocabulary in the construction of its duplum voice; the effect of this limited melodic vocabulary is a heightened sense of repetition throughout the setting.

At stake here is another facet of duplum composition interested in testing out melodic materials over the course of a clausula, but one that is far less conspicuous as a strategy for cultivating a sense of musical play than previous examples. Nonetheless the demonstrable melodic economy of both the MARIA VIRGO and [AUDIVI]MUS clausulae seems to have been an important tool in the creation of a duplum voice, offering singers powerful means to cultivate melodic familiarity within a setting, as well as exploring the potential limits of melodic materials through variation and adaptation. Viewed in this light, the use of limited melodic vocabularies within a setting may also be regarded as a key melody-building strategy through which a singer was able to engage with melodic material in new ways.

SHADES OF PLAY?

These three case studies have served to illustrate the quite different ways singers were able to employ forms of melodic repetition as means of experimenting with musical ideas in their duplum voices. A few features of this play, and how it may be achieved, are worth
emphasising. First, and perhaps most fundamentally, the testing out of melodic material within a clausula relies upon a level of distinguishability as it comes to be reused, though the degree of specificity of this melodic repetition can vary from piece to piece. Second, over the course of this experimentation, the melodic figure in question may be subject to variation and adaptation. The case of VADO, however, illustrated how the restatement of just the opening portion of a melodic figure is often enough to draw attention to the occurrence of repetition. Third, the use of repetition, and more generally, the sustained re-use of specific melodic ideas within a setting, may be closely tied to the structural design of the setting. Whether simply in terms of consonance, and a consistency of intervallic relationships between parts, or more large-scale associations made through melodic repetition, the re-use of melodic material often appears closely co-ordinated with, and thus enabled by, the specific design of the clausula’s tenor voice.

My analysis has also sought to make a case for the contrasting forms of repetition, and by implication, the different means by which singers may seek to experiment with their particular melodic materials. By highlighting repetition as one tool of many called upon by singers in the process of creating a duplum – itself a tool used at different levels of focus within a setting – I have argued for several different shades of melodic play, and the ways such techniques may be utilised in the compositional design of a clausula. While descriptions of the compositional process underlying the formulation of a clausula’s upper voice have typically been couched in terms of systematic play, this analysis has presented evidence to suggest that other, less overt ways to draw out an idea may also be identified, thus positioning repetition as one of an arsenal of melody-building techniques available to singers. My primary focus, therefore, has been to open up discussion of this compositional process to reflect the different ways – and contrasting extents to which – singers may play with melodic material. But it has equally attempted to augment existing characterisations of melodic composition by demonstrating a greater level of nuance in the exploration of melodic materials among duplum voices than has been previously recognised. This meeting ground of clausulae then, with each setting presenting varied forms of repetition and reuse, serves to expand understandings of musical play within this repertory and what it means to experiment with the melodic design of a clausula.
5. REPEATED-NOTE PATTERNS: USES AND FUNCTIONS

The clausulae to be discussed in this part of the chapter, characterised by a pre-occupation with repetitions on individual notes, betray a level of melodic similarity that offers further reflection upon the shared ways of creating a duplum voice. Indeed, this form of repetition clearly presented boundless creative opportunities to singers, with surviving collections of clausulae bearing witness to numerous different permutations of this technique. Some of these settings illustrate the potential for highly thematised explorations of repeated-note ideas. But it would seem that such ideas may take on subtler melodic or formal functions as well, suggesting a spectrum of uses – even within a single setting – and contrasting degrees of use for this compositional technique. At one end of this spectrum stands a setting of the melisma [CAPTIVITÆTEM], from the Ascension chant Alleluia V. Ascendens Christus (M23). Unique first and foremost in the content of its upper voice, the setting is preserved as a clausula in F (Example 3.31) and as the motet Salve mater fons hortorum.¹¹⁴

The underlying premise of the clausula’s duplum is easily identified. Set on two statements of the chant melisma, each with a different rhythmic arrangement, the central tenet of the setting is fixed around the sustained use of repeated-note patterns – an idea extended through numerous transpositions and variations. In this respect, the setting harks back to the example of TANQUAM 7 that introduced note repetitions as a technique underpinning duplum composition: in both settings, this idea is used as the primary material for melodic design. But while the basis of TANQUAM 7’s duplum seemed to be something of a compositional challenge (‘How far can this single melodic figure be maintained?’), or ‘At what point must I deviate from this repeated-note idea?’), the clausula presented in Example 3.31 now offers an opportunity to develop more nuanced understandings of this technique’s use. For, melodically speaking, the setting illustrates at once the possibility for highly thematised appearances of repeated-note ideas while also pointing towards their ready adaptability. Far from formulaic, their exploration seems to cultivate variation throughout the duplum voice on a level not seen in TANQUAM 7. Furthermore, the setting provides an opportunity to explore how this idea may take on several contrasting musical functions. Not just a device drawn

¹¹⁴ This motet is preserved in F fol. 401v, and also in W2 fol. 176v, as Salve virgo fons hortorum.
Example 3.31  [CAPTIVI]TA[TEM], F fol. 160v II
upon for melodic ends, the formal and harmonic consequences of the idea’s use present
further means of understanding note repetitions as a compositional resource for fashioning a
duplum melody.\textsuperscript{115}

The majority of duplum phrases in the first half of the clausula make use of the same
essential melodic idea built upon small units of three repeated notes which come to be
restated at various transpositions. The first phrase (x), for example, is formulated from a
series of three such units that outline a movement from $c$ to $b$ to $c$ before coming to a unison
close with the tenor on $a$. And this initial idea might be viewed as a template from which
other phrases are derived. In fact, the same melodic design is maintained throughout much of
the first tenor cursus of the setting: phrases labelled $x^1$, $x^2$, $x^3$, and $x^4$ each clearly betray a
close relationship to the opening figure. Running parallel to observations of melodic
similarity, however, is the recognition that each of these phrases offers a subtle melodic
reformulation upon this opening idea. $x^1$ and $x^4$, for instance, not only introduce note
repetitions at different pitch levels, but the endings of these phrases are also altered, now
descending by step from $c$ to $g$. And $x^2$ presents a truncated version of the melodic idea,
reducing note repetitions from three to two. In other words, while repeated note units can be
viewed as the dominant melodic design drawn upon in this duplum, it was a design that
appeared to invite reinterpretation at almost every available opportunity.

Speaking further to the continuous reworking of this melodic idea, note repetitions are
once more reformulated in the second cursus of the setting, with an increase from three
repeated pitches to five marking the beginning of duplum phrases at $y$. At the same time,
appearances of this melodic figure are now matched by a remarkable consistency in the
intervallic relationship between duplum and tenor voices. Here, the start of each phrase
containing the $y$ figure is uniformly marked by the interval of a fourth and its end always
draws towards a unison. Then follows a move in the duplum towards $a$ (shown at $z$) –
perhaps an anticipation of the note on which the tenor melisma and duplum eventually end –
that offers a new area of melodic focus. Interestingly, it is at this point that the only apparent
dissonance between tenor and duplum can be identified (highlighted in red). As the tenor
moves down by step from $c$ to $a$ against the unwavering repetitions of the duplum, the second
long of the phrase gives rise to a vertical interval of a second. It would seem, in this instance,

\textsuperscript{115} Examination of the harmonic implications of upper voice design is a strand of analysis more thoroughly
examined in the realms of the motet. On this, see for example Dolores Pesce, ‘Montpellier 8 PORTARE Motets
and Tonal Exploration’, in Catherine A. Bradley and Karen Desmond, eds., \textit{The Montpellier Codex: The Final
Fascicle. Contents, Contexts, Chronologies} (Rochester NY, 2018), 233–53.
that the prominence of this idea, and the importance of its continuation has taken precedence over underlying notions of consonance between voices.\textsuperscript{116}

The contrasting uses of repeated-note figures conveyed in this \textit{clausula}, both exact and varied, highlight the extensive reformulation to which this melodic idea may be subject in a setting. The possibility for such reformulation is drawn into particular focus here since tenor statements present differing rhythmic patterns, and thus, changing harmonic implications for a duplum design. Two questions quickly emerge. The first is associated with the issue of scalability and with exploring how and where specific melodic ideas, and more broadly, the use of note repetitions as a melody-building technique, were employed across \textit{clausula} settings. For, given the special fascination afforded to repeated-note patterns in this \textit{clausula}, as well as the earlier example of \textit{TANQUAM 7}, I now seek to ask how one might characterise their contrasting uses as a compositional resource for the formulation of a duplum voice. Second, and already intimated above, I wish to examine the ways that this melodic technique interacted with and responded to the harmonic possibilities presented by a tenor melisma.

**COMPOSING WITH COLOR**

In response to the first issue, it is notable that my delineation of this compositional technique is not without precedence. Indeed, surviving witnesses of one mid-thirteenth-century theorist active in Paris, Johannes de Garlandia, also describe the use of repeated-note patterns as a familiar melodic procedure with a distinct identity, including it in writings on the concept of musical \textit{color}.\textsuperscript{117}

Of course, appearances and discussions of the term \textit{color} are not unfamiliar in thirteenth- and early-fourteenth-century theoretical writings on music, including those by Anonymous IV, the St. Emmeram Anonymous, Walter of Odington, and Johannes de Muris. Something of a ‘loaded concept’, however, the word presents a number of interpretative difficulties for modern writers on account of its range of meanings across the middle ages,

\textsuperscript{116} A similar situation was also observed in \textit{TANQUAM 7}; see 174–182.

\textsuperscript{117} For an overview of Johannes de Garlandia, his identity, and his connection to Paris, see Constant J. Mews et al., ed. and tr., \textit{Johannes de Grocheio: ‘Ars musice’} (Kalamazoo, 2011), 8–9.
often serving to connote the character or quality attributed to a melodic line just as much as it described a distinct figure or embellishment of that figure. Responding to these interpretative challenges, scholars in recent decades have probed its medieval musical uses, often situating color within the broader context of the artes poeticae and ars memoriae, as a musical analogue for an idea whose basis is to be found in rhetoric. To such ends, writers including Edward Roesner, Guillaume Gross, and Ronald Voogt have sought to place value on the aesthetic (as well as the compositional) significance of color, emphasising a connection between music and poetic arts; as such, their descriptions not only refer to color as a compositional device, but as a means to create beautiful music, pleasing to listeners.

As Gross argues, ‘[p]leasure and beauty stand in a direct relationship to the phenomena of recollection and repetition, which generates an affective liaison, emotional in its intent’. With several commendable summaries of the term’s broader usage now readily available, however, I forego a general introduction here. Yet as I draw upon and respond to aspects of these studies in what is to follow it might already be said that the concept of color constituted an important reflection by (near) contemporaneous theorists upon an apparently distinguishable feature of thirteenth-century compositional practice and its creative milieu, a feature that came to be explained through vocabulary and concepts already in use in other intellectual and didactic contexts in Paris.

Johannes discusses color at two points in his treatise on measured music: first in relation to issues of consonance and dissonance, and then, in greater detail in chapters 15 and 16 – the final chapters transmitted in Jerome of Moravia’s compilation. It is in these


119 While such studies – notably, those of Guillaume Gross – have generally sought to demonstrate the proximity of poetic and musical traditions, it would be revealing to note the kinds of productive differences that may arise between the two.

120 Specifically, see Roesner, ‘Subtilitas and delectatio’, 33–35; Gross, Chanter en polyphonie 124–134; and Voogt, ‘Repetition and Structure’, 34–46.


122 In addition to the studies noted here, see Mary Channen Caldwell, ‘Singing, Dancing, and Rejoicing in the Round: Latin Sacred Songs with Refrains, circa 1000–1582’ (Ph.D. diss., University of Chicago, 2013), 96–101. See also above at 147, no. 15.

123 In the Paris version BnF Lat 16663 this is fol. 72ra (chapter 11). For more on this, see Gross, Chanter en polyphonie, 112.

124 This is the manuscript BnF Lat. 16663, fol. 66r–76v. For issues of attribution relating to chapter 15, see Reimer, Johannes de Garlandia, 18–32. Here, Reimer notes that this chapter only survives in the manuscript
chapters that the treatise suggests some of the ways that color may be used as a strategy for creating and enhancing a melodic composition. Describing it as a pleasing feature of a piece – one that can be cultivated through a sense of idiomatic familiarity – it states the rule:

‘Set colores in the place of unfamiliar musical elements that are in proportion [i.e., of comparable size]; the more the colores, the much more familiar the music will be, and if it becomes familiar, it will be pleasing’.

‘Pone colores loco sonorum proporcionator ignotorum, et quanto magis colores: tanto sonus erit magis notus Et si fuerit notus. erit placens’.

As Mary Caldwell rightly notes from this description, colores might thus be understood as units of melodic material ‘that are made “familiar” (“notam”, from notus, known or recognised), whether through their repetition in an individual work… or through familiarity from a previous existence within a different work’. That is, they are compositional resources defined by their recognisability, their use across the repertory in turn bespeaking an important principle underlying the compositional process of a piece, based on common musical ideas. An implication of this definition, Guillaume Gross explains, is that ‘evocations of color indicate a complicity between people aware of the same things; they suggest an “unspoken”, an art of the implicit, and the use of shared behaviours which imply a common culture’.

A polyphonic setting could thus be formulated from an interconnected range of techniques that all belonged together as part of a wider compositional practice, and that may be drawn upon in specific instances in order to create a memorable composition. Implicit in the treatise’s description of color, therefore, is the recognition of the existence of common ways to formulate a melody that may be reused on the level of an individual setting, as well as more broadly across multiple clausulae.

BnF Lat. 16663, compiled by Jerome of Moravia – a point that perhaps indicates a later date for this part of the treatise.

125 Translation from Roesner, ‘Subtilitas and delectatio’, 34, slightly adapted.


128 Gross, Chanter et polyphonie, 128. ‘Les évocations du color indiquent une connivance entre des personnes avisisées de choses semblables; elles suggèrent un “non-dit”, un art de l’implicite et l’emploi de codes partagés qui sous-entendent une culture commune.’
*Color* seems to have had a hermeneutic resonance for medieval practitioners as well – a point brought out in the treatise’s stance on how one is to listen to this music.\(^{129}\) Suggesting that the use of *color* is able to elicit an emotional response from listeners, it also defines the term thus:

‘*Color* is the beauty of [musical] sound, that is, of the object of the sense of hearing, through which the sense of hearing takes pleasure’.

‘*Color est pulchritudo soni vel obiectum auditus, per quod auditus suscipit placentiam*.\(^{130}\)

Importantly here, the treatise’s approach can be seen as situated in terms of what is being heard – ‘*secundum auditum*’ – that is, it is concerned with a kind of musical knowledge ‘which is gained through sense perception’, as Bob Antley has suggested.\(^{131}\) The focus thus seems directed towards understanding how the use of particular compositional procedures may be experienced in performance, and in so doing, it not only offers an explanation of some constituent elements of composition practice, but a framework for interpreting those elements as well.\(^{132}\) According to the treatise’s definition, then, *color*, on a musical level, is created by the reuse and resulting familiarity of melodic ideas, but on a hermeneutic one, it is a compositional resource that inspires delight and beauty. Together, the description that is cultivated is one predicated upon a complicity of listening between the creator of a piece and its auditor: it is through that which is recognised and thus, what is shared, that a listener may take pleasure in what has been heard.

The use of repeated-note patterns features in the characterisation of one particular type of *color* in the treatise, termed ‘*florificatio vocis*’. This technique is described in the following way:

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\(^{129}\) For the deepest consideration of medieval modes of listening, and how modern auditors might approach the task of analysis, see Sean Curran, ‘Hockets Broken and Integrated’, 31–104, especially from 64.

\(^{130}\) Translation from Roesner, ‘*Subtilitas* and *delectatio*’, 34.

\(^{131}\) Bob Antley, ‘The Rhythm of Medieval Music: A Study in the Relationship of Stress and Quantity and a Theory of Reconstruction with a Translation of John of Garland’s *De Mensurabili Musica*’ (Ph.D. diss., Florida State University, 1977), 102. For Antley, this point is suggestive of the treatise’s grounding in Aristotelian philosophy.

\(^{132}\) In a similar vein, see Garlandia’s discussion on consonance and dissonance in chapter 10 of the treatise.
‘In florificatio vocis, color is made as the commixcio [joining of sounds] in monophonic conductus. This commixcio is always made with conjunct sounds, and not disjunct ones’.

‘In florificacione fit color ut commixcio in conductis simplicibus. Et fit semper ista commixcio in sonis coniunctis et non disiunctis.’

Example 3.32  Example of florificatio vocis in Jerome of Moravia’s compilation of De mensurabili musica, BnF Lat. 16663, fol. 75v

This ‘flowering’ of the voice, the treatise proposes, creates color through the multiple repetitions and embellishments of a single note. Supplying a musical example with this description (Example 3.32), the treatise states that the ‘commixcio’, or joining together of sounds required in order to make color is only to be realised in conjunct and not disjunct motion. Admittedly, however, there remains some interpretative ambiguity as to the specific melodic idea being illustrated here: it may be the multiple repercussions of a single note, but might perhaps involve the alteration around two (or more) notes, as Edward Roesner has suggested. Moreover, no information has been provided to explain how this idea was actually to be performed. Seeking further clarity, Roesner proposes that a similar term, flos harmonicus, employed in another discussion within Jerome of Moravia’s compilation of treatises (on the performance of plainchant), offers insight into the melodic behaviour represented by florificatio vocis. Although no musical examples are provided in this part of the treatise, Jerome’s description of flos harmonicus makes clear that it is a type of vibrato or

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trill upon a single note – a behaviour that Roesner views as analogous to *florificatio vocis*. Jerome’s comments are worthy of consideration, Roesner suggests, since, ‘although they are intended specifically for monophony, the author briefly mentions the subject of organum, noting that singers often mix it with chant’. 135 But other commentators, including Ronald Voogt, have expressed unease at Roesner’s equation of the two terms, suggesting that while both illustrate some type of repetitive ornamentation upon a single note, it is unlikely that they are the same, considering their lexicographical differences, the different musical repertories to which they were applied, and the fact that no mention of *color* is made while discussing *flos harmonicus*. 136 Rather more neutrally, Voogt instead proposes a characterisation of *florificatio vocis* as ‘some kind of rapid repetition of the same note’, using the potential ambiguity associated with the term to explore a range of possible uses for this melodic idea across surviving manuscripts. 137

If, then, the term is to be understood as a melodic technique based upon the repetition of individual pitches, its identification in the treatise as an exemplum of *color* suggests that, on a basic level, this idea was a familiar element of compositional practice. Moreover, situating *florificatio vocis* within the category of *color* has important implications for *clausula* composition. First, and since the treatise’s description appears to be one dependent on melodic experience, implicit in the account is the acknowledgement that this melodic technique had a distinct identity – one recognised by both singers and listeners. Second, the treatise’s description of *florificatio vocis* suggests that this was an idea that came to be defined as much by its sheer range of appearances – and thus, a high degree of familiarity – as it was by a distinctive melodic character.

A degree of openness in the term *florificatio vocis* may be exactly the point, therefore. 138 Indeed, in the following analysis I come to suggest the range of appearances of pitch repetitions within *clausulae* suggests a far from singular description of this technique; the treatise’s lack of specificity in turn appears to reflect a musical situation which itself was

135 Ibid.


138 This reading of *florificatio vocis*, and of *color* more generally can be seen to differ markedly from Anna Maria Busse Berger who equates the notion of *color* with ideas of melodic formulae (see *Medieval Music*, 165). As I seek to show, however, the many different forms of *florificatio vocis* among *clausulae* seems to necessitate a more flexible description of this term.
especially diverse. It would thus seem possible that what was being described in the treatise was less a discrete melodic figure and more a vocal effect – one with which singers readily experimented in the process of creating an upper voice. Furthermore, by viewing such writings in more descriptive (rather than prescriptive) terms, the treatise’s attempt to interpret familiar musical features of this practice seems to offer a more encompassing reading of how color may be applied by singers in multiple musical contexts. In sum, if the treatise’s definition of florificatio vocis is to be regarded as an attempt to distil and document a melodic technique viewed as eminently identifiable, it was also a technique that maintained its distinguishability as it threaded its way from piece to piece. To point out these different uses in turn begins to answer questions of the scalability of melodic resources across settings. The delineation of florificatio vocis as one means to create color suggests that this technique received sustained use, and most likely, in this sustained use, was tailored to multiple different polyphonic situations. Engaging with the different forms of this melodic technique will consequently draw out some of the contrasting ways in which repeated-note figures were used as a tool for duplum composition, offering an opportunity to understand its widespread uses, and moreover, how these uses helped to cultivate a sense of melodic familiarity across the repertory.

IDENTIFYING NOTE REPETITIONS: VARIATION AND RE-USE

Taking up such a premise, another clausula, similar to the initial [CAPTIVITEM] example, that makes use of repeated-note patterns is the clausula [ET CONFITEBOR (F fol. 154r V – Example 3.33) for the Purification chant Alleluia V. Adorabo ad templum sanctum tuum (M12). In fact, with its two-statement tenor, this clausula makes use of an almost identical compositional design to that of the [CAPTIVITEM] setting. Similarly too, the [ET CONFITEBOR clausula’s primary melodic material, based upon the repetition of individual notes, takes on several contrasting forms. Arranged into a series of highly repetitive duplum phrases, these different uses begin to show that repeated-note figures were not simply included as superficial additions to a setting – stock phrases inserted into the duplum voice – but that they may form an integral part of the clausula’s overall design. Moreover, as will

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139 The tenor design of both clausulae is exactly the same: the first statement is set in units of three longs, while the second is based on a five-note pattern formed of three longs, followed by a double long, long figure.
become clear, their appearances betray an attentive awareness of the organisational design of the tenor voice, with the use of particular note-repetitions providing a means to test out areas of tonal emphasis in the setting, allowing singers to explore the harmonic implications of this technique in the process.

One of the melodic ideas based around a repeated-note technique in this clausula is shown at x. Here, the duplum’s design is not so much based on regular patterning of material as it is a fixation around one or two notes. In the first phrase of the clausula, this focus is around f and d, with the duplum melody circling these notes in conjunct motion. The second phrase of the clausula (x’), outlines an identical melodic idea, though the end of the phrase has been slightly adapted. Importantly, the duplum’s pre-occupation around these pitches seems largely informed by the melodic profile of the tenor. The f of the duplum’s first phrase, for example, fits neatly against the chant melisma that itself moves between c and f, and a desire to end the phrase at the unison draws the duplum down towards d. The second phrase follows a similar trajectory with a move from the same f down towards a unison with the tenor c. In fact, a desire for a consistent intervallic relationship with the clausula’s chant foundation results in the frequent adaptation of repeated-note ideas at numerous points throughout the setting. Further evidence of such behaviour can be identified later on in the clausula, at a point first labelled at y in the clausula, where the duplum is fixated around repetitions on a c, stating this note eight times within the phrase. Again, the harmonic alignment of voices at the ends of tenor phrases is readily discernible. Here, the ends of both tenor ordines (highlighted) coincide with the c of the duplum, resulting in unison intervals between parts. When this phrase appears almost exactly a little later in the clausula (y’), against a section of the tenor with a quite different melodic profile, the note repetitions, and consistent consonant intervals between parts, are still maintained. Specifically, this section of the tenor melody, now centred around an f, still produces a perfect consonance with the duplum’s note repetitions, though it does so at a fifth rather than a unison. This level of co-ordination between parts throughout the setting was surely no coincidence. Rather, it would seem that the composer of the duplum voice spotted the potential for repetition in the duplum of this clausula, adroitly setting similar melodic figures against contrasting portions of the tenor melisma. This repetition seems to have served him twofold, not only as a means of cultivating melodic familiarity within the setting, but also offering new ways to hear the duplum voice against different melodic units of the tenor.
Example 3.33  [ET CONFI]TEBOR, F fol. 154r V
A further version of the melodic idea based around note repetitions is labelled at \( z \). Consisting of units of three repeated pitches combined together into larger phrases, it serves as a particularly clear example of how melodic figures built upon note repetitions can be tailored to the polyphonic design of a clausula. In this setting, while the particular pitches used for this duplum idea appears seem to vary, its underlying melodic character remains the same: indeed, eight phrases (numbered 1–8 in the example) bear witness to this shared design. Some, including nos. 1, 3, 5, 7 and 8 preserve the same constituent repeated note units with remarkable exactitude; others introduce subtle melodic or rhythmic variants at several points. Nonetheless the particular focus afforded to this duplum design suggests that it had a clear melodic identity – an identity with an inherent flexibility in its possible realisation.

The larger question of melodic identity, in turn, seems central to understanding the wider usage of this compositional technique: clearly, many different realisations of repeated note patterns can be traced across the clausula repertory, and even within a single setting. But beneath this surface level flexibility, the melodic basis of this technique appears to remain constant, centred around the sustained repercussion of individual pitches. The issue of melodic identity might thus be seen as rooted to questions of note repetition: of why, when using this technique, notes came to be repeated rather than simply held. The answer to this, I suggest, helps to pinpoint the defining features of this technique. For the constant repetition of individual notes can be seen both to add emphasis to certain pitches within a duplum voice, marking them as melodically distinctive, and also to furnish melodic figures with a pronounced rhythmic character that can be identified from piece to piece.

Such an observation becomes all the more striking in consideration of other clausula settings that preserve similar melodic designs. Comparing duplum phrases from the \[ \text{ET CONFI} \text{TEBOR clausula} \] with the \[ \text{CAPTIVI} \text{TA} \text{TEM} \] example that opened this discussion (shown in Example 3.34), for example, it is clear to see that closely similar melodic figures have been utilised in the melodic design of each. Both upper voices explore a duplum design based on the repetition of three repeated notes that are restated within a phrase according to the same patterned design. To be sure, each extract contains differences in detail specific to the particular polyphonic context of that clausula. But the underlying elements of the two are closely aligned; more than a shared ‘way of doing things’, here is an example of an idea built on a repeated-note pattern being used explicitly across more than one clausula. This observation is especially interesting because it adds another layer of understanding to the
ways melodic figures may be reused across the repertory. That is, while there is ample evidence of the subtle reworking of materials in the formulation of an upper voice, both on the level of an individual setting and more broadly, the example illustrates how a specific melodic figure may also gain a distinct identity – to the extent that it was used in the upper voices in multiple clausulae. At once, this suggests a propensity towards melodic variation, and also an awareness on the part of singers of readily identifiable strategies for fashioning a duplum that were used with a degree of stability between settings.

**Example 3.34** Comparison of repeated-note idea in [ET CONFI]TEBOR, *F* fol. 154ª V and [CAPTIVI]TA[TEM], *F* fol. 160ª II

I want to suggest, therefore, that the use of repeated-note patterns had particular currency in upper-voice design. Moreover, while this melodic technique may be experimented with quite freely among duplum voices, the recurrence of a specific melodic figure among several different clausulae gives weight to the hypothesis that this was a melodic unit known to singers creating an upper voice and utilised in a number of ways. It also points to two different though complementary ways that such figures operated in this repertory: that there was a willingness to experiment with constantly changing forms of repeated-note patterns; and also, that these patterns also attain a level of distinctiveness that can be discerned across their range of uses. These observations, in turn, might already be seen to offer something of an analytical parallel to characterisations of *color* expounded in
the treatise of Johannes de Garlandia. Indeed, evidence of this melodic technique’s constant reuse both within a clausula and across the repertory might be viewed as a musical exemplification of the aesthetic of repetition and reformulation engendered by the treatise’s description of the term.

But while definitions in terms of melodic identity might, on one level, provide an effective means to characterise the uses of this duplum figure, there is scope to look beyond the upper voice to explore some of the other roles this idea may have taken on within clausula design. Most important of these is the observation that repeated-note patterns are often carefully coordinated with the melodic and rhythmic organisation of the tenor voice. As such, and through this close relationship between voices, the use of this melody-building technique may also take on particular formal functions within a clausula, shaping the compositional direction of a setting, for instance, through particular tonal emphasis. Such an idea has close connections to what Fritz Reckow, in his discussion of compositional procedures, characterised as processus within a piece: ‘a “course” [ein “Ablauf”] from a beginning to a goal’. Specifically, while the use and reuse of repeated-note patterns can be seen as means of generating melodic familiarity within a setting, this technique is not only to be understood on solely melodic terms, but also as fundamentally involved in reading and interpreting a clausula’s tenor. The connection between tenor and duplum voices, and the resulting intervallic relationships created by this interaction, therefore deserve consideration for what they too reveal about the way repeated-note patterns were used in the process of composition.

The final example of this section thus demonstrates how the use of note repetitions as a basis for duplum composition may have important harmonic implications that shape the way both voices are to be heard in an ongoing ‘process’ within a clausula. Set on the melisma MANERE, from the gradual for St. John the Evangelist, Exiit sermo (M5), the duplum of this clausula seems preoccupied in maintaining, as far as possible, a focus around a specific set of pitches. Against the tenor melisma, the result of this melodic design is that

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141 The clausula presented here is transcribed from F fol. 151r VI, and is also recorded in W1, fol. 50r VI. The setting is one of a group of four clausulae on this melisma, copied in close proximity in both manuscripts, that are combined together as the widely transmitted piece Serena virginum and the two-part motet Manere vivere/ MANERE. On the relation of this clausula to other transmissions, see Wulf Arlt, Ein Festoffizium des Mittelalters aus Beauvais, 2 vols. (Cologne, 1970), Darstellungsband, 275–300; Baltzer, ‘Notation, Rhythm, and Style’, 266–268; and Ernest Sanders, ‘The Medieval Motet’, in Gattungen der Musik in Einzeldarstellungen I, 497–573, at 515.
certain pitches are highlighted within the setting – that the melodic consistency of the upper voice seems to create regions of tonal emphasis that mark this fundamentally melodic vocal technique as a harmonic tool as well. In so doing, the design of this duplum can be seen as directly involved in shaping the formal characteristics of the clausula.

Example 3.35  MANERE tenor melisma, F, fol. 151r VI

![Example 3.35](image)

The tenor voice itself plays an important part in this compositional idea. Drawn from a fifth-mode chant, the thirty-six note melisma on MANERE, ‘to remain’ (Example 3.35), has been portioned up into three-note units, set into a recurring rhythmic pattern of longs.\(^{142}\) Within this particular arrangement, the note c becomes the principal focus of the tenor – something largely to be expected as the usual reciting tone of a fifth-mode melody. But the prominence ascribed to this pitch in the melisma is striking: fifteen cs can be identified – over 40% of the entire melody – with all but one tenor ordo containing this note.\(^{143}\) Most crucially, the emphasis on this pitch seems to have been one recognised by the creator of the duplum, since this upper voice offers a fitting response shaped by its own melodic focus.

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\(^{142}\) For a detailed discussion of this tenor melody and its textual origins, see Curran, ‘Hockets Broken and Integrated’, 66–68.

\(^{143}\) Given the clausula tenor’s preponderance around this single pitch, it seems particularly fitting that this setting is on the word ‘manere’, to remain. It is tempting to imagine that this was a musical and textual analogy that would also have been noticed by singers and listeners. Indeed, such connections have been the subject of significant study in the realms of the motet. Ardis Butterfield, for example, has demonstrated how the intersection between motet texts and tenors created ‘new semantic possibilities for composers’, ‘The Language of Medieval Music: Two Thirteenth-Century Motets’, Plainsong and Medieval Music 2 (1993), 1–16, at 15; Baltzer (and others) has highlighted the ability for upper voices to offer verbal ‘tropes’ of their tenor, ‘Aspects of Trope in the Earliest Motets for the Assumption of the Virgin’, in Peter Lefferts and Brian Seirup, eds., Studies in Medieval Music: Festschrift for Ernest H. Sanders (New York, 1991), 7–42; and Dolores Pesce has demonstrated how the depiction and reconstruction of particular liturgical images emerge from the single word of the tenor, ‘The Significance of Text in Thirteenth-Century Latin Motets’, Acta Musicologica 58 (1986), 91–117.
The duplum voice’s interest in repeating particular pitches throughout the *clausula* is most keenly visible at the opening of the setting, where it is almost entirely fixed around $g$. Above tenor phrases 2–5, the duplum does little else but restate this single pitch (highlighted in the example), such that any deviations away from it serve merely as fleeting embellishments of this monotone repetition. It is only at the shift in the tenor towards $f$ (x in Example 3.36) that the duplum is drawn away from this pitch, moving briefly to a unison $f$ with the chant, before once more returning to a $g$. As the tenor melisma falls from its ascent up to a high $g$ back to its typical ambitus around $c$, however, the duplum slowly shifts its melodic focus downwards. From the point marked $y$, the duplum descends over the course of a phrase to a range closely aligned to that of the tenor. In consequence, the final phrases of the duplum now circle around $c$, shadowing the tenor melisma in unison. The melodic focus of the upper voice can thus be seen to outline a move from a $g$ in the first part of the setting to a $c$ at the *clausula*’s close.

**Example 3.36** MANERE, *F* fol. 151r VI

One of the effects of this melodic design is the creation of a tonal emphasis that underlines the overall shape of the *clausula*. The interest in note repetitions maintained
throughout the setting results in a duplum that would appear to be engaged in decisions about harmonic planning and tonal emphasis. Since the tenor melisma is focussed consistently around a c, the duplum’s orientation first around a g and then c results in a harmonic focus within the clausula that moves from a fifth to a unison. The result is the creation of two contrasting tonal regions in the duplum – one characterised as fixed above the tenor, the other, centred closely around the same pitches as the chant melisma. The interest in pitch repetition first suggested by the tenor melisma is thus drawn out and amplified in the upper voice, utilised as a means of creating a large-scale harmonic movement that can be traced across the entire setting. To now take up Reckow’s notion of processus in this light, the use of repeated-note patterns might in turn be viewed as an important aspect of compositional form within this clausula – one less concerned with thematic unity, and more orientated toward musical effect. Here, the sense of progression that develops through the setting is not elicited by any systematic or structural organisation, but is shaped by the ‘tension and motion’ of the two voices set against one another; the resulting tonal emphasis speaks of a formal plan linked closely to this melodic technique.\textsuperscript{144}

The case of the MANERE clausula, then, serves as eloquent witness to the ways duplum material may serve more formal functions within a composition as well as offering the potential for melodic invention and exploration. In so doing, the setting foregrounds a new set of criteria for the analysis of duplum melodies that offers further ways to understand the role of such techniques in the construction of a clausula more generally. Repeated-note patterns might thus be regarded as a significant compositional resource, and one that operated on several different compositional levels in a setting. In the realms of melodic design, it is clear that, as a vocal effect, it was readily utilised in a range of instantiations and in some cases, these melodic figures can be seen to overlap from piece to piece, suggesting common approaches by singers. Furthermore, the evident distinguishability of this technique is paired with the recognition that melodic figures are frequently tailored to specific polyphonic situations within a setting and adapted as singers saw fit. But this is not the only layer of the compositional process in which repeated-note patterns can be said to play a role. The ability for such melodic patterns to be employed in more formal contexts, as a means to shape the harmonic relationship between parts, seems to offer further evidence of the creative ways that singers engaged with their melodic material, drawing out a myriad of possible uses these fundamental compositional techniques.

\textsuperscript{144} Reckow, ‘Processus und structura’, 34.
6. **COMPOSITIONAL FRAMEWORKS AND DULUM DESIGN**

The analytical focus of this chapter has so far been largely directed towards melodic aspects of duplum design. In so doing, the investigation has paid particular attention to a selection of melodic ideas and techniques for extending those ideas that thread their way through the clausula repertory. This emphasis has sought to throw light onto conventions for devising an upper voice and the habits of singers which underlay this process, arguing for a number of interconnected melodic behaviours and compositional techniques in this musical practice. But it has also been an aim to demonstrate that the formulation of a duplum melody may attend to and come to bear upon other components of clausula design as well. Be they concerns for melodic, rhythmic, harmonic or structural aspects of a setting, the creation of an upper voice, I have come to argue, is modulated by numerous compositional decisions that can affect the design of a clausula as a whole.

Attuning more closely to this hypothesis, in the final part of this study I examine the relationship between such compositional considerations and the formulation of a duplum voice. The central proposal of this section is that, as a duplum sets out to explore and experiment with a musical idea, the manner in which it does so may invariably be shaped by broader notions of clausula design. That is to say, for singers, preliminary procedures underlying the creation of a clausula – questions not only concerning the arrangement of the tenor melisma, but the content of the duplum voice, its rhythmic design and phrase structure, and the harmonic relationship between parts – necessarily impinge upon the clausula’s resulting form. Viewed together, I suggest that these decisions might be seen to create certain underlying compositional frameworks that come to inform the conception of a clausula and the relationship between the duplum and tenor voices. Such conceptual frameworks – structural blueprints, however loosely or rigidly defined – may then come to be inhabited within a clausula, moulded by singers in performance as they set about exploring a particular compositional idea.

Of course, one might expect such frameworks to vary in their degree of specificity. While some clausulae appear to betray overtly thematised designs that suggest a high level of determination in the conception of the setting, others simply seem regulated by more general notions of style, consonance, or rhythmic design for example, indicative of common approaches of singers. But whatever the degree to which such frameworks appear to define and delimit compositional possibilities within a clausula, the parameters within which a
singer appears to be working when creating a setting deserve careful consideration. For here it is possible to uncover another facet of this compositional practice – beyond evidence of melodic reuse – based on the structural underpinnings of a setting. And even if the motivations underlying this compositional process may now be difficult to determine – in some cases, it would seem that the duplum voice may be the driving force behind a particular structural model, in other instances, the duplum may be reciprocating something established in the tenor, or else, the two may be conceived of together – their palpable use has significant implications for questions of compositional planning and duplum design.

Example 3.37  GAUDETE, F fol. 176v V, 1

An example of a clausula in which such considerations appear to have discernibly influenced the design of its duplum voice sets the tone for this discussion (presented in Example 3.37). Built on sixteen pitches of the melisma GAU[DET] – from the chant Alleluia V. Hodie Maria (M34) for the Octave of the Assumption – two principal factors seem to guide the formulation of its duplum melody. The first concerns issues of phrase structure. In this regard, the tenor of the clausula arranges pitches of the chant into recurring patterns four notes in length, rendering them as double longs. Above this, the duplum melody can be seen to share a similar interest in periodic design. In fact, this upper voice reciprocates the phrase structure of the tenor so that the end of each tenor ordo is marked by a simultaneous break in the duplum. It might therefore be said that one motivation behind the formulation of the duplum voice is the desire for a consistent, patterned alignment between parts in the setting. A second framework obtaining within the setting is governed by the intervallic relationship between voices. Here, the clausula can be seen to exhibit a pronounced affinity for perfect
consonances – in particular, the use of unison intervals becomes a defining feature of the setting. Such a point is readily observable in the first three *ordines* of the *clausula* which all end on a unison, while the same tactic can be heard at the opening of the second, third, and fourth *ordines* as well (marked in boxes). Most emphatically, unison intervals between voices are brought to the fore in the final phrase of the *clausula*, moving in an embellished stepwise descent from c-b-a. In this regard, the underlying compositional design of this upper voice is closely bound to the movement of the tenor, its melodic material reflecting this chant foundation closely. Both in terms of its phrase structure and its intervallic implications, decisions governing the conception of the *clausula* and the relationship between parts can be seen to have directly influenced the content and form of the duplum voice: here, at least two basic frameworks underpin the formulation of this upper voice.

But while such compositional decisions can be identified on a circumstantial level, from *clausula* to *clausula*, with relative ease, the stakes increase somewhat when similar frameworks for composition can be discerned on a repertory-wide scale. Offering another dimension to a consideration of shared techniques for constructing a duplum voice, the use of similar designs across multiple settings argues for a more encompassing notion of this compositional process than is currently available – one that recognises the possibility for *clausulae* to be linked not only by interconnected melodic materials, but by similar compositional models as well. Such a compositional approach presents a further opportunity to understand the kind of intertextual possibilities for devising a *clausula*. In this regard, the treatment of the shared models by singers points towards what Richard Crocker once termed ‘successive composition’; where one piece, or one particular organisational framework becomes the basis for multiple new compositions.\(^{145}\) Put another way, it argues for the constant reformulation and transformation of compositional structures – a cumulative compositional practice underpinning *clausula* design.

The historiography of twelfth- and thirteenth-century *clausula* composition, however, has yet to fully assess the possible use of such frameworks in the design of a duplum voice. Where discussions of compositional models are to be found – most often in the domain of *organum purum* – their analytical goal is often directed towards uncovering notions of

musical ‘grammar’; or ‘house style’ among repertories. And though the notion of grammar as a category for understanding the conventions for building a melody has enabled persuasive arguments about duplum composition to be made, nevertheless a clausula’s duplum is rarely viewed in more formal terms, in the light of structural and harmonic considerations that underpin a setting.

Yet groundwork for such an approach has been laid by those scholars who have begun the task of examining common melodic behaviours traceable across organum and clausula repertories. Of especial importance here are studies by Edward Roesner and Jennifer Roth Burnette in which the analysis of musical frameworks governing the formulation of a duplum has received its fullest attention to date. In a similar vein to Margaret Bent’s discussion of a ‘dyadic grammar of counterpoint’ in fourteenth- and fifteenth-century polyphony, Roesner suggests that the design of the upper voice of a setting is governed by an ‘overall contrapuntal framework’, determined by notions of consonance between voices. Seeking to account for variant forms of melodic lines across surviving manuscripts, he proposes that underlying each setting is an “‘original’ form” – an outline of a general harmonic movement – whose details may be realised in multiple different ways. Offering a more detailed assessment of this proposition, Roth Burnette’s PhD thesis sought to investigate how the creation of a duplum line might involve ‘a harmonic framework (based on tenor-duplum intervals) on which melodic formulae are employed’. Through a comparison of a related group of Office organa, she argues for ‘an underlying melodic grammar, a set of rules governing the composition of duplum melody’ built upon determinable intervalllic relationships between voices. But while both studies offer valuable insights into the ways harmonic models influence the design of duplum melodies, their focus is limited primarily to purum repertories and to issues of consonance; there thus

147 This is Edward Roesner, ‘Who “Made” the Magnus Liber?’, and Jennifer Roth-Burnette ‘Organizing Scripture’.
149 Roesner, ‘Who “Made” the Magnus Liber’, 257.
150 Roth-Burnette, ‘Organizing Scripture’, 17.
151 Ibid., 195.
remains considerable opportunity to expand this work onto the formal structures discernible within the *clausula* repertory.

Where harmonic frameworks have been examined as evidence of a musical grammar, rhythmic frameworks have been considered for what they may reveal about strategies of memorisation and the working methods of singers in the transmission of their music. Important studies – not only in the realms of musicology – have here demonstrated the role of mnemotechnical tools such as versification and the use of patterned structures as not only facilitating memorability, but an aid for transmission and the generation of new composition as well.\(^{152}\) In her study of compositional process in twelfth- and thirteenth-century polyphony, for instance, Anna Maria Busse Berger suggests that creators of *clausulae* may impose ‘a strict structure on these pieces to make them memorable, both for the composer himself in the process of composition and for the performer in the process of transmission’.\(^{153}\) The value of this work lies in uncovering how inherent features of this music may have been utilised for structural ends, especially in a compositional environment largely underscored by unwritten practices of making music. However, there remains a need to look beyond the pragmatic function of such rhythmic models as a means to explain the types of musical frameworks underscoring *clausulae*, and to consider how they may be utilised in the process of composition – less as a strategy of mnemotechnical manipulation, and more as a creative means of devising a *clausula* setting.

In part, therefore, my aim is to draw renewed attention to the potential for polyphonic frameworks to influence the formulation of a duplum melody. But my emphasis differs from existing studies because I adopt a more interconnected view of the constituent elements of *clausula* composition, recognising the potential for a reciprocity between the design of voices, and crucially, because I seek to investigate how shared models may be used across multiple *clausulae*. To this end, in what follows I present two examples – two different uses of compositional models – that provide a basis for the discussion of shared polyphonic structures. The first sets out instances in which *clausulae* upon the same melisma appear to use a single structural framework; the second, explores the compositional possibilities presented by one widely-used design.


ONE MODEL, THREE CLAUSULAE

In my analysis of clausulae on the melisma TANQUAM, I identified one particularly clear example of polyphonic settings linked by a shared model for composition. There, I suggested that the clausulae TANQUAM 6 and TANQUAM 10 were not only intimately linked by their use of the same melodic material, but that they also experimented with the same fundamental compositional design. Far from coincidence, the striking similarities of the two settings argued for a case where one structural model became the basis for both compositions, realised in subtly different ways. In so doing, the clausulae offered convincing testimony in favour of the reformulation of settings based on a pre-existent – and in this case, highly distinctive – compositional framework.

Taking up this line of enquiry beyond the TANQUAM example, I propose that the use of shared frameworks for constructing clausulae may yet have wider reach. This is because it is often the case that multiple settings of a single portion of chant betray a number of musical characteristics – beyond their melodic behaviours – that appear to suggest the existence of interrelated structural designs. Indeed, such a hypothesis becomes the point of departure for a study by Danielle Pacha which seeks to examine seven musically-related motets on the VERITATEM melisma (from the Gradual Propter veritatem).154 Noting a number of structural similarities, Pacha considers the interaction between upper voices and tenors of the motets to argue that ‘a network of borrowing among these pieces extends beyond the tenor design and certain aspects of large-scale structure’, to the extent that a number of subtle melodic interrelationships can also be discerned.155 Complimentary to and building upon such an approach, I now want to suggest that similar networks of borrowing may well be in operation across the clausula repertory; that a number of frameworks for design can be discerned among settings, and as Pacha has argued, such frameworks may often span more than one compositional level of a piece.

The example to be called upon first is of three clausulae set on the melisma REGNAT from the Assumption chant Alleluia V. Hodie Maria (M34). The three settings in question are copied contiguously on a single folio of F (fol. 167r I, III, and VI) and are all unica.156 The clausulae are noteworthy, in particular, for their unusual tenor design. Set in the third mode,
each of the settings portions up the REGNAT melisma into a ten-note pattern; this arrangement is characterised by an especially long break between tenor ordines, three longs in length.\textsuperscript{157} In the first and last of the clausulae (fol. 167\textsuperscript{v} I and VI), such an arrangement can be identified in every tenor cursus; in the second (fol. 167\textsuperscript{v} III) it is only used in the opening cursus, while the remaining two tenor statements shorten the rest between ordines to only one long in length.\textsuperscript{158} It was this striking tenor design that first drew the attention of Rebecca Baltzer to these clausulae, remarking upon the fact that such extended breaks between tenor ordines are ‘nearly unique in the Notre Dame repertory’.\textsuperscript{159} Noting the same rhythmic design in all three (which she labels F no.174, no.175, and no.176), Baltzer sought to compare the settings in order to understand the chronological relationship between them in compositional terms. And while the basis for her conclusions are not presented in this work, Baltzer proposed that ‘the first piece, F no.174, with its three tenor statements, served as a kind of model for parodying by the others’ – not only in the melodic content of the duplum, but in terms of the clausula’s overall design as well.\textsuperscript{160}

Structural similarities between these clausulae can be traced on multiple compositional levels and Baltzer’s suggestion of a connection between settings, in this regard, is astute. However, there is little concrete evidence beyond codicological arrangement to suggest that F no.174 served as the basis for reformulation for the other two clausulae, and it would seem that, for Baltzer, the issue of chronological priority took precedence over questions concerning compositional process. Yet, to approach these pieces from the issue of musical design, the near identical structures evidenced across the three clausulae offers a pronounced example of the use of a single model as the basis for multiple compositions on the same melisma.

Example 3.38 presents a comparison of all three duplum voices against the first statement of the REGNAT tenor. It quickly becomes apparent that the settings bear very close resemblance to one another, quite beyond their tenor design. Each clausula, for example,

\textsuperscript{157} This is a formulation found nowhere else in the clausula repertory.

\textsuperscript{158} Interestingly, though the second and third tenor cursus of the REGNAT clausula on fol. 167\textsuperscript{v} III separates ordines with a single long rest, breaks are still consistently notated in F with double stroke marks.

\textsuperscript{159} Baltzer, ‘Notation, Rhythm, and Style’, 155 no. 1. Baltzer also highlights an additional case of the four-part MORS clausula in which a fifth mode pattern is extended with rests three longs in length in the second tenor statement.

\textsuperscript{160} Baltzer, ‘Notation, Rhythm, and Style’, 158.
Example 3.38  Comparison of duplum voices in *REGNAT clausulae*, *F* fol. 167° I, III, and VI (tenor cursus 1)
makes use of the same periodic duplum structure: duplum voices consistently overlap with the three-long rests of the tenor, always beginning at the same point against the tenor. Melodic material also frequently recurs across all three settings with very little variation. The first phrase stands as a case in point: here, each upper voice opens with the same descending scale from c to g set in the third mode, and, setting aside the small differences between voices in the middle of the phrase, each voice also finishes at exactly the same point, at a unison with the tenor. Similarly, the third and fourth phrases of the clausulae bear witness to almost identical melodic lines (all marked in red boxes); once more, it is the beginning of ordines that remain the most consistent across versions. At the phrase labelled x, for example, the melody for the first five longs of the duplum is exactly the same across all three witnesses; it is only at the end of the tenor ordo, when the duplum continues as a solo voice, that a flexibility in its material can be determined. This level of melodic stability between settings is interesting because it seems to suggest two considerations informing the melodic design of duplum voices. The first is that a concern for shared material is at its most pronounced at the opening of phrases and second, it would appear that opportunities for melodic freedom are introduced at points where the duplum is not proceeding in direct response to the tenor melisma.

But even where duplum lines do differ in Example 3.38, the nature of melodic ideas would appear to be governed by very similar notions of consonance. Most significantly, this appears to result in the ends of duplum phrases, wherever variation can be identified, still coming to a close on the same note across the three clausulae – in almost every case at a unison or octave interval with the tenor. Perhaps the most clearly discernible case of this is shown at the end of the phrase marked y: though the duplum voices offer three quite contrasting melodic formulations at this moment, all arrive back on a g to coincide with the beginning of the next tenor ordo. Only the end of the duplum phrase marked z (in F fol. 167v III and VI) offers a point of contrast – instead of arriving at a g at the close of the ordo, these two clausulae rise up to a fifth. That is to say, one further factor shaping the content of upper voices in the three clausulae would appear to be related to a desire for intervallic consistency.

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161 Exactly the same opening material can also be found in REGNAT clausulae on fol. 166v VI and fol. 168v I of F.

162 A concern for melodic consistency across REGNAT clausulae, especially at the beginning of settings, has also been noted by Bradley, Polyphony in Medieval Paris, 91.
The striking resemblance between clausulae extends to the second tenor statement as well, shown in Example 3.39 (the example omits the second tenor statement of fol. 167 v since the rhythmic pattern of this clausula changes at this point). As in the first, the periodic phrase structure and rhythmic design of each part remains the same; several exact recurrences of melodic figures can also be discerned (shown in boxes). Additionally, openings of duplum phrases maintain a close affiliation to one another – in all but the second ordo, duplum voices begin on the same pitch and outline a similar melodic movement. And while a greater degree of creative latitude in the specific content of upper voices can be discerned here, the level of similarity still suggests closely related approaches to formulating the two settings.

How, then, can the compositional processes underlying the construction of these three REGNAT clausulae be characterised? Whoever created these settings, I propose, did so with an underlying template in mind: a single compositional framework underpinning the design of each clausula. These frameworks can be seen to operate on multiple levels, affecting tenor design, intervallic relationships, melodic content, and duplum periodicity; moreover, over the three settings, these elements are realised in subtly different ways. I suggest, therefore, that
the settings present three different realisations of the same overall model. And while it would appear that this design maintains a high degree of stability from piece to piece, opportunities for variation and flexibility serve to distinguish the clausulae in a manner that adds weight to the idea that singers inhabited such templates in creative ways. Finally, it would also seem that the compositional similarities obtaining within these clausulae were also recognised by scribes. Preserved within a group of thirteen clausulae all setting the melisma REGNAT, these three compositionally related pieces are copied contiguously on the page, their grouping together serving as a codicological analogue to the readily discernible musical similarities. Of course, this grouping does not discount the possibility that the scribe was simply copying from an exemplar which itself collected these clausulae together. Yet it does signal a further layer of connection between these pieces – one that resulted in three settings with related musical features copied in close proximity to one another.

ANTIPHONAL STRUCTURES: A CASE STUDY

One of the underlying features of the compositional framework that connects the three REGNAT clausulae is the use of an antiphonal structure – that is, an alternation between tenor and duplum melodies within the polyphonic design of settings. In each clausula, voices abide by this plan throughout so that the beginning of one voice consistently coincides with the ending of another. Significantly, this is a compositional plan that seems to have had legs in the clausula repertory – it can be identified in a number of further instances across manuscripts, used to varying extents in defining the structure of settings. To this end, antiphonal structures present a particularly interesting case study to explore the hypothesis that one compositional model may be used as the template for multiple polyphonic settings. For they not only argue for the existence of frameworks governing the formulation of a setting on a repertory-wide scale, but they also present an opportunity to examine how such frameworks may be reified differently by singers in performance and adapted from piece to piece.

On a foundational level, the decision to design a clausula according to an antiphonal structure can be seen to impose certain conditions upon singers in the process of composition, establishing parameters that guide their work. By implication, a level of predetermination necessarily underpins the conception of such a setting. When singers set out to arrange a
clausula according to this plan, preliminary questions concerning the arrangement of voices would probably have been decided on in advance, to some degree of specificity – questions, for instance, such as: which voice is to begin this antiphonal exchange? How shall each voice be structured? And how are the voices to overlap? Indeed, the kind of vocal alternation prescribed by this antiphonal setup gives rise to an interaction between voices that foregrounds the highly co-ordinated nature of their design. Not least in this regard, such a design enables the possibility of imitation and melodic exchange between parts in a particularly marked way, where the melody can be passed quite literally between tenor and duplum. But when it came to realise this compositional plan in practice, such an organisational strategy may also have been of interest to singers for the kind of freedoms it afforded them in melodic design. Most obviously, this can be seen in the fact that voice parts are typically arranged to alternate with one another, thus reducing the frequency with which parts sound together; concomitantly, the need to arrange voices against each other is far less of a concern. Only at the beginnings and endings of phrases between the tenor and duplum parts does consideration of intervallic relationships need to be addressed – the melodic content of what comes between is not affected by such issues. As such, the upper voice is able to exercise considerable freedom in its formulation in a way that is not possible if voices were set together homophonically.

One clausula that bears witness to exactly this approach can be found on fol. 163’ V of F, set on the word ‘DOCEBIT’ (Example 3.40). Its duplum, sounding alone, opens the clausula with a sequential melody in the third rhythmic mode. Six longs later, the tenor enters with its first four pitches, and voices alternate antiphonally from that point onwards so that a consistent periodic structure is maintained throughout. The clausula’s tenor is set in longs, with a rest dividing the first and second pitches of every phrase; and tenor phrases are themselves separated from one other by rest three longs in length. It is above this prolonged rest that the duplum explores its own melodic material.

The use of an antiphonal structure in this clausula appears to define certain elements of its musical design. Most obviously, the pattern of alternation established between voices serves to create a consistent organisational plan where the end of one voice’s phrase coincides with the start of the other’s. Another aspect of the setting determined by this compositional model seems linked to the harmonic relationship between voices. While voices

\[163\] From the Pentecost chant Alleluia V. Paraclitus spiritus sanctus (M26).
Example 3.40  DOCEBIT, F, fol. 163v V
only overlap for the length of a long at any one moment, these instances of vertical interaction always result in consonant intervals. Fifths are by far the most common interval to be found in the clausula (occurring more than twice as frequently as any other), but the remainder are consonances too: octaves, unisons, and one fourth. This is significant because it suggests that, even though the melodic materials of the two voices are, in some respects, handled quite distinctly, the upper voice is always formulated with an eye to the intervallic relationship it will have with the tenor as parts come together.

Yet while this template for clausula design can be seen to determine certain compositional elements of the setting, within these parameters, the duplum is able to explore its melodic material largely unimpeded. In this respect, the extended opening idea of the upper voice appears to serve as a basis for much of what comes to be explored in the rest of the clausula. The opening four longs of this phrase (x), for instance, are restated exactly twice more in the clausula, at x¹ and x², and slightly varied at x³. The end of this figure, marked at y is also subject to exact repetition later in the setting, as shown at y¹, and in inversion at y² and y³. More generally, the scalar descending movement of this opening phrase seems to have been assimilated into the melodic vocabulary of the duplum, so that almost every phrase includes conjunct figures in a third mode pattern at some point. The melodic inspiration of this clausula’s duplum, therefore, seems less a response to features of the chant melody outlined in the tenor voice – its purpose, rather, appears to be in offering melodic (and rhythmic) contrast. Though a clear structure can be seen to guide several aspects of this clausula’s design, the content of the upper voice does not appear to be restricted to a significant degree by this compositional plan.

But where the DOCEBIT duplum makes only sparse attempts to echo the melodic material of its tenor, another setting on the melisma ET FLOREBIT, copied within the organum Alleluia V. Iustus germinabit (M53) – Example 3.41 – appears to engage quite explicitly with its chant melisma; in so doing, the clausula illustrates how the use of imitation may serve as a powerful melody-building tool within this compositional model. Like DOCEBIT, ET FLOREBIT is arranged so that the two voices interact antiphonally: once more, it is the duplum that opens this exchange, alternating with the tenor in short four-note phrases. Unlike the previous case, however, this upper voice deviates intermittently from a strict antiphonal structure, extending phrases so that in a number of instances, voices can be heard directly against each other. Here, the use of such a design seems to be less a prescriptive template determining the
Example 3.41 ET FLOREBIT, F fol. 141v
Interconnections between the two voices can be identified from the very opening of the *clausula*. Indeed, the four-note rhythmic pattern that forms the basis of setting’s tenor is first heard in the duplum – the similarity of rhythmic design making the interplay between the voices explicit. But this reciprocity also extends to influence melodic aspects of the *clausula*. In this regard, the first phrase of the upper voice can be seen to take on an anacrusic quality that serves to anticipate the start of the tenor chant. Not only does the rhetorically distinctive four-note rising scale pre-empt the rhythmic pattern of the tenor, its ending on an *f* also coincides with the chant’s starting note – a melodic ‘upbeat’ that sets this compositional plan in motion. Immediately following this first tenor phrase, the duplum, marked at *x*, then proceeds to exactly imitate the contour of the chant just heard, a sixth above. Similarly, in the second statement of the *clausula*, the phrase at *y* can be seen to imitate the tenor phrase it follows – it would appear that this kind of explicit melodic imitation was a recurring feature of this dupum’s design. An affinity for the melodic shapes of the chant melisma is traceable at other points in the upper voice too: the same *x* figure is not only heard once more, later in the setting, but gives rise to a number of similar ideas, such as *y*, which permeate the melodic design of the duplum throughout. One further instance of this melodic interaction, where the chant appears to provide inspiration for the upper voice, is first introduced by the tenor phrase shaded in the example. This four-note unit of chant, distinguished by its note repetitions, is once more taken up and adapted in ensuing duplum phrases. Harking back to this figure, the phrases marked *z*, for example, present an inversion of the idea which then comes to be extended through sequence.

Other, more subtle melodic connections facilitated by this antiphonal structure can also be drawn out of the *clausula*. One neat example of the possibilities for melodic exchange between parts is circled in the example. Here, an idea based upon conjunct scalar motion is passed from duplum to tenor and back again. First outlining a descending movement from *d* to *a*, the duplum can be seen to pre-empt the scalar design of the tenor which picks up this idea moving from the *a*. Immediately following this, the duplum again draws upon the melodic shape of the chant, now ascending once more from *g* to *c*. In other words, this small section of *clausula* appears seems to demonstrate both the close relationship the upper voice

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164 This, in turn, seems to offer another way to view the ‘original conception’ idea proposed by Roesner in ‘Who “Made” the *Magnus Liber*?’, 256–7.
has with its tenor, and also the acute awareness of the chant melisma singers must have had, to the extent that they were able to pre-empt its material in the design of the duplum.

The *ET FLOREBIT* clausula can thus be seen to structure voices according to an antiphonal plan for the express purpose of exploring possibilities for imitation between the two parts. The ability to set voices against each other in this overt way in turn seems to afford opportunities for melodic interplay bound up directly with this compositional design. *In toto*, then, it would appear that this clausula presents a radically different interpretation of the organisational strategy identified in the earlier *DOCEBIT* example. The connecting thread through the two settings, however, seems to be an evident fascination in experimenting with an identical compositional model for clausula design – one based on an antiphonal relationship between voices. Of course, it remains to be said that such a template does not seek to describe all aspects of clausula design and provides ample opportunity for melodic creativity and invention on the part of singers. Indeed, both settings are impressed with their own particular interpretations of this structure, giving rise to differences in rhythmic pattern and melodic design. However, in seeking to recognise some of the common features of these two settings, it seems that there may well be more that connects the compositional process for making a duplum voice, beyond the shared melodic behaviours discernible across manuscript collections. Additionally, it would appear that elements of a clausula’s overall compositional design can also be traced across the repertory – that structural models for making a clausula came to underpin this musical practice as well.
7. CONCLUSIONS: WAYS OF MAKING A DULPLUM VOICE

Over the course of this chapter I have sought to identify some of the compositional possibilities available to singers for creating upper voices of clausulae and charted their use across the repertory. These possibilities – traced within individual settings, across families of clausulae, and more broadly – seem to be characterised by their diversity and flexibility, testament to a constantly renewing musical practice within which these settings were cultivated. Indeed, a detailed examination of clausulae on this repertorial scale has sought to illustrate just how contrasting these settings, and the musical techniques underlying their composition, may be. An aim of this chapter therefore, has not only been to delineate specific melody-building techniques used by singers in the creation of a duplum voice, but also to demonstrate something of the range of uses these techniques came to receive across surviving manuscript collections. And as a result of this approach, my analyses have uncovered a number of large-scale melodic interconnections that can be tracked across many corners of this repertory. The consequences of such work, I suggest, are far-reaching for clausula scholarship.

On the level of an individual piece, the various case studies drawn upon have demonstrated how specific melodic techniques were experimented with to different degrees of intensity in a setting. Some have illustrated highly thematised expositions of duplum ideas, while others highlighted the potential for considerable variation in melodic design. Cumulatively, these examples have served to expose many of the compositional decisions, priorities, and motivations that appear to have guided singers in this creative process. But as I have moved from piece to piece, seeking to identify and account for compositional features of a clausula’s upper voice, it has also been possible to connect together certain melodic behaviours that appear similar in form. The presence of a number of closely related ways of creating a duplum voice evidenced across the repertory has come to argue for a conception of this musical practice linked by a number of common approaches to composition. In this regard, and supported by the sheer number of clausula examples that can be seen to make use of the same melodic techniques, the case for a process of composition being defined by a number of shared ways of making an upper voice now seems persuasive.

In parallel with these shared compositional approaches is the recognition that singers continually experimented with their musical ideas in the creation of upper voice melodies.
Both within a clausula setting and across the repertory, the remarkable flexibility of duplum materials uncovered in this study highlights a compositional situation in which melodic ideas, and techniques for extending those ideas, were subject to near constant change. It also points to singers’ interest in and awareness of an intertextual basis for clausula design: where new approaches to duplum composition themselves became the basis for further new composition. Above all, the evidence brought forth here in support of the ready adaptability of musical ideas challenges conceptions of duplum design based on the use of melodic formulae. Indeed, my analysis of musical techniques used across multiple clausulae has sought to temper and add greater nuance to this view. For while I have suggested that a number of duplum ideas appear to maintain clear melodic identities as they came to be used across clausula settings — and in so doing, invoking characteristics that resonate with previous commentators’ identification of melodic formulae — I have shown that their re-use is often bound up with subtle variations and differences in detail. This suggests that existing understandings of ‘melodic formulae’ in duplum composition appear far more analytically reductive than the musical situation in evidence across the surviving clausula repertory. In seeking to account for these constantly adapting melodies, and in order to gain a better understanding of the working methods of singers, I wish to argue for a view of upper voice formulation more closely attuned to this potential for flexibility. Where some previous scholarship worked from more codifying analytical paradigms, I now propose that the adaptability of melodic figures evidenced across this repertory represents a much more fluid musical situation, reflective of singers’ interest in melodic experimentation, than previously thought.\textsuperscript{165}

In recognising the potential mutability of melodic ideas across the clausula repertory, my analysis has also illuminated a range of formal functions that duplum voices may take on within a setting. Far from simply serving as a melodic gloss upon a pre-existent chant melisma, I have sought to show that duplum melodies can often play a more integrative structural role in shaping the design of a setting. The use of certain compositional techniques for building a melody can frequently be seen to establish quite fixed musical parameters for singers that define and delimit the content of the upper voice. And whatever these parameters may be — whether they impact upon a clausula’s phrase design, on notions of consonance, or

\textsuperscript{165} One pronounced example of a study working from such analytical paradigms can be found in Tischler, The Parisian Two-Part Organa; other studies, including Baltzer, ‘Notation, Rhythm, and Style’, and Smith, ‘The Clausulae of the Notre Dame School’ have also devoted energy to isolating and cataloguing melodic formulae. Indeed, it is only more recently, in Bradley’s Polyphony in Medieval Paris that the need for a more localised case-study approach has been made, highlighting some of the difficulties of repertorial extrapolation.
come to establish a pattern of repetition to be followed throughout the setting, for example –
the use of such melody-building techniques actively supported the compositional process of
singers who sought to test out particular musical ideas against the changing foundations of
their underlying chant material. Significantly, this conception of duplum composition,
extending beyond purely melodic function, begins to acknowledge the structural importance
of upper voices within a clausula setting; moreover, it points towards a further facet of
duplum design based on the existence of certain compositional models or frameworks which
govern the formulation of a clausula as a whole.

I would suggest, therefore, that singers, when creating a duplum melody, were
thinking in a very active way about how to put two voices together within a setting. More
than this, as they worked, it would seem that they were well aware of the structural
implications of their designs. That is to say, the exploration of melodic ideas and
compositional techniques within a clausula is frequently paired with a deep awareness of
how an upper voice will relate to its tenor. In fact, one often finds that the specific
arrangement of pitches within the tenor melisma seems to have facilitated a particular
melodic design of the upper voice. This suggests a level of reciprocity between a clausula’s
chant foundations and the musical ideas determining the formulation of the duplum voice that
argues for a far more interconnected relationship underpinning the conception of the two
voices.

It may be said that this account of upper voice behaviours of clausulae has itself been
somewhat clausula-like. Most obviously, in its approach, this study has been one orientated
around a series of case studies, focussing upon a limited group of melodic techniques and
investigating their use. This mosaic approach has the benefit of engaging in a very direct way
with some of the compositional methods traceable within individual settings – an approach
that then enables questions of the scalability of compositional processes within clausulae to
be posed on a repertory-wide level. At the heart of the work of this chapter, therefore, is the
wish to understand more fully the working habits and compositional decisions of singers as
they created an upper voice of a clausula. The picture that now emerges from this analysis is
one of a highly interactive, continuously adapting compositional environment that speaks
quite directly to the sheer range of strategies for devising a duplum voice, and a desire to
experiment with these strategies in ever new ways.
IV. CONCLUSIONS AND QUESTIONS

This thesis has explored the compositional processes through which twelfth- and thirteenth-century singers created two-part *clausulae*. Beginning from the broader context of medieval Paris, its methodological starting point lay in the surviving manuscript collections of the *clausula* repertory. An investigation into the nature and status of these sources not only served as a necessary philological introduction to musical materials; it also laid important groundwork for understanding the broader musical environment in which this polyphony was created.¹ From this broad vista of Parisian polyphony, the thesis took up each voice of *clausulae* in turn, analysing the musical techniques that underpin their designs. In so doing, it uncovered and explored a range of approaches for fashioning a *clausula* setting, and questioned the compositional implications of their use. While previous studies of this repertory have most typically approached analysis of *clausulae* from a chronological standpoint, or through the lens of oral or written practice, this thesis has made the case for an analytical methodology based on a very close engagement with individual *clausula* settings. Working from series of case studies of *clausulae* outwards, it has identified a number of specific musical techniques found in individual settings and tracked their use from piece to piece. By observing and attending to these different strategies for creating a *clausula*, it has also been possible to build up a picture of some of the more typical approaches taken by singers in this compositional process. My analytical focus on individual *clausulae* has in turn thrown new light onto the levels of musical reuse that can be traced across the repertory, offering fresh insight into the ways singers reformulated and adapted their materials. But this close study of individual *clausulae* has also highlighted the possibility for very contrasting compositional approaches, demonstrating something of the sheer diversity of techniques available to singers. Indeed, it would now seem that the continuous experimentation with musical materials – the exploration of multiple different ways of singing a chant melisma and constructing duplum melodies above this liturgical tenor – was an essential tenet of *clausula* composition.

¹ This is to invoke the notion of a ‘sonic environment’ drawn upon by Emma Dillon in *The Sense of Sound*. Dillon’s aim to explore the ‘sonorities or sounding realities of the medieval environment’ through its ‘more durable [written] records’ is one that chimes closely with the work of this thesis (*The Sense of Sound, 7*). For further discussion of this idea in a medieval context, see Curran, ‘Vernacular Book Production’, 100–1.
A central argument of this thesis is that clausula tenors exhibit a far deeper engagement with practices of singing chant than has been appreciated in scholarship to date. Positioning Parisian manuscript sources of chant at the centre of analysis for the first time, I have sought to show the extent to which creators of clausulae were not only aware of, but also actively sought out compositional opportunities presented by their chant materials. My analyses have, in consequence, revealed highly varied approaches to setting chant into clausula tenors. Crucially, I have argued that the spectrum of possibilities available to singers was contingent on their essential knowledge of chant and its underlying melodic features: in many ways, the creation of tenor melodies is best viewed as an extension of practices of singing chant itself. What appears to change in the rhythmically measured treatment of chant, however, is a pronounced sense that singers were able to play with and reformulate liturgical melodies in a variety of forms. Some clausula tenors betray especially close relationships to the internal melodic figures of chant melodies, where ways of singing plainchant – reflected in the notation of these melodies in chant books – seems to have actively influenced the organisation of pitches in rhythmic measure. Other clausula tenors respond to certain melodic properties inherent to the chant melody by newly articulating these features in discant. And at the furthest end of this continuum of compositional approaches, singers were able to portion up melismas and set them to rhythmic patterns in markedly abstract ways – in designs that seemingly have little to do with the chant’s original monophonic context. Together, this range of clausula tenor designs stands as testament to a highly sophisticated engagement with chant traditions that evidently evoked very contrasting compositional responses from singers. Furthermore, this diversity has also argued for a much more flexible conception of chant melodies in this polyphonic context, bringing to the fore numerous cases of chant adaptation and manipulation. Tenor voices of clausula settings, it seems, appear to be governed by a looser sense of fidelity to a liturgical chant, allowing singers to engage with these melodies in overtly compositional or artistic ways.

The study of upper voices of clausulae presents a number of analytical challenges for scholars, most especially on account of the range of melodic similarities and interconnections discernible across the repertory. But where a number of previous studies, particularly in the realm of organum purum, have sought to identify a number of melodic formulae from which this polyphony is made, this thesis has shifted the analytical focus onto a range of musical ideas and techniques used by singers in the process of composition. One benefit of this methodological reorientation has been a more nuanced recognition of potential melodic relationships across multiple settings, where a single melodic ‘idea’ may be interpreted by
singers in several different ways. At the same time, the delineation of a number of melodic techniques in evidence across the clausula repertory has also illustrated an interest in testing out individual duplum ideas in particularly sustained ways. Focusing upon these individual usages, and concomitantly, in moving between specific clausula case studies and a repertory-wide view of melodic techniques, a number of compositional approaches which recur across the repertory have begun to emerge. These support a view of duplum melodies as deeply interconnected to one another, based on wide-ranging melodic reuse and reformulation. This analysis has also asked new questions about the relationship between duplum and tenor voices that have challenged assumptions that duplum voices are simply a response to – and are necessarily dependent on – a clausula’s underlying tenor design. It has sought to show that the process of duplum composition may be less contingent upon the tenor voice than previously thought – that the tenor does not necessarily determine the melodic content of upper voices. Rather, it appears that upper voices often played a shared or reciprocal role in the compositional form of a setting, serving to articulate certain musical features of the clausula in marked ways. The sum of this work has therefore sought to get closer to an understanding the daily practices of singers who created these upper voice melodies: extrapolating from the manuscripts in which this repertory is preserved, it has attempted to re-imagine the musical culture in which these singers participated, contributed, and performed.

In view of the scope and emphasis of this thesis, however, certain aspects of study have been left for future work: I have not, for example, been able to engage with issues of notation and scribal orthography in any detail here. Further careful study of the similarities and differences in the way shared melodic figures are notated in and among manuscript sources might sharpen ideas about how these ideas were conceived of and recognised by scribes, and transmitted among sources. While notational ‘house styles’ have been viewed by some commentators as identifiable features of the main magnus liber manuscripts, an examination of the ways specific musical behaviours are notated within individual sources and across witnesses (consistently, or otherwise) would be an important contribution to scholarship on this topic.

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2 In studying manuscript F directly, it is clear that the clausula fascicle contains a number of erasures and other issues of copying that merit further investigation, as does a study of notational orthographies used in this part of the book (and across the manuscript more broadly).
An additional direction for research, in view of the findings highlighted in this thesis, is an examination of the relationship between features of the clausula repertory and a number of related medieval polyphonic genres. With regard to tenor design, for example, might it be the case that some motet tenors exhibit close affinity to practices of singing chant, just as some clausulae have been shown to do? While the work of Catherine Bradley has suggested that the treatment of chant in clausulae and motets may be quite distinct from one another, further engagement with the spectrum of tenor arrangements discussed here may offer valuable insight into the ways motet composers also viewed their tenor foundations, and indeed, how such approaches may differ from (or relate to) clausulae.3 The possible relationship between duplum voices identified within the clausula repertory and the collections of organum purum presents a further avenue for research. For although the clausulae and organum purum are distinguished by fundamentally different approaches to rhythmic organisation, it may well be that some of the shared features of melodic design that have been identified in the clausula repertory also obtain in purum; a study of the similarities and differences between these styles may shed further light on the new musical opportunities presented by the clausula’s rhythmically measured context. Equally, a consideration of the similarities and differences between the melodic behaviours of clausulae and other contemporaneous musical genres (for example, the conductus, and secular song) remains only a nascent feature of scholarship; a detailed study in this area may yet expose further aspects of the complicated and interacting compositional situation of medieval Paris.4

The work of this thesis has, at root, concerned itself with the question of clausula composition; it sought to attune closely to the intricacies and complexities of a living and changing musical practice now fixed within surviving manuscripts. If the musical behaviours identified and analysed above have broadened conceptions of the process of composition, the motivations of singers underlying this process may have also moved into the light. After all, this was music not only to be collected and preserved, but to be performed and to be heard. It is hoped that this more detailed knowledge of the approaches, the compositional possibilities, and the ambitions of those singers will enable a more sensitive understanding of the musical culture within which they worked.


4 Recent studies touching on this point can be found in Mark Everist, Discovering Medieval Song: Latin Poetry and Music in the Conductus (Cambridge, 2018), 181–213; and Bradley, Polyphony in Medieval Paris, 146–178.
### APPENDICES

#### APPENDIX 1  Surviving sources of *organa* and *clausulae* consulted in this study.¹

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APPENDIX 2  Comparative table of DOMINUS clausula tenor melodies
APPENDIX 3.1  REGNAT clausula – F fol. 167v I
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