

Tonal Organisation in Some *F-MS* Two-Voice Motets

Daniele Sabaino

Università degli Studi di Pavia-Cremona
daniele.sabaino@unipv.it

Il saggio esamina l'organizzazione dello spazio sonoro dei mottetti a due voci del ms. Pluteo 29.1 della Biblioteca Medicea Laurenziana di Firenze, prendendo in considerazione le maniere con quali i Tenores sono stati ricavati dalle melodie liturgiche di riferimento, il disegno melodico della voce superiore e le relazioni verticali che segmentano le frasi musicali. L'analisi rivela (1) come la modalità dell'*octoechos* sia uno strutturante assai debole del decorso musicale di ciascun mottetto, nonostante la presenza di un Tenor tratto da una linea melodica per definizione modale, e (2) come il fluire della musica sia dunque regolato essenzialmente dalla forza dell'interazione verticale delle voci. La comparazione con l'organizzazione dello spazio sonoro dei conductus della medesima polifonia gotica che chiude il saggio dimostra infine come, paradossalmente, la coesione modale dei mottetti sia ancor più debole che nei conductus, nonostante questi ultimi siano stati composti senza legami con melodie liturgiche preesistenti.

The essay examines the tonal organisation of two-voice motets from Firenze, Biblioteca Medicea Laurenziana, ms. Pluteo 29.1. For each of them, the way in which the Tenor was extracted from chant, the melodic pattern of the upper voice, and the vertical relationships that subdivide the music continuum into discrete units are taken into account. The analysis reveals that (1) *octoechos* modality is a very weak structuring element of the musical flow, despite the modal-by-definition nature of their Tenores, and therefore (2) motet tonal organisation is not regulated by modal considerations, but by the force of the vertical interaction of the two voices. The comparison with conductus from the same Gothic repertoire that closes the essay, finally, shows that, paradoxically, the modal texture is weaker in motets than in conductus, even though these one have no connection to pre-existing liturgical melodies.

1 IN a paper presented at the “Gothic Revolution” Congress held in Princeton in November 2011, I analysed the two-part conductus repertoire in order to discover how those pieces were arranged from the point of view of tonal organisation (SABAINO 2013). The analysis showed, among other features, an enormous prominence of G and D finals, a very tiny percentage of F (and A) finals and an almost non-existent recourse to E finals (but with some variance according to different local and chronological usage). It also illustrated how the general contours of melodies, the difference in voice range according to each *finalis* and the frequency of vertical coincidences around this very note are in some way related to – without however completely coinciding with – the modal categories of chant habits and theory. Chant modality, however, seems to play a very weak structural role in the development of the overall musical motion: the basic material employed in each piece has plain modal traits, but the manner in which it is handled is very much less influenced by any modal factor than, for example, by the vertical interaction of the voices.¹

This conclusion raises a number of other questions. For example: (1) Are these behaviours typical (only) of the conductus as a genre, or do they also concern other genres of Gothic polyphony? (2) Does this weak (but in any case existent) structuring qualification of chant modality also affect compositions such as *clausulae*, *organa* and motets, founded upon a pre-existent, modal-by-definition plainsong? (3) Are there any clear differences in behaviour between compositions of different local and chronological provenance?

The present essay aims to answer some of these questions through a close consideration of some two-voice motets. In order to have a coherent and manageable group of composition with which to work, I have selected the thirty-nine two-part motets contained in the ninth fascicle of manuscript F² – that is, all the motets in the fascicle but (a) the three double motets *Mors que stimulo / Mors morsu nata / MORS, Stirps Yesse progreditur / Virga cultus nescia / FLOS FILIUS EIUS*, and *Ypocrite, pseudopontifices / Velut stelle firmamenti / ET GAUDEBIT*, and (b) the last, incomplete *Gaude rosa speciosa* (the list of compositions examined is given in Table 1). All these motets were transcribed by Hans Tischler in his *Earliest Motets*;³ for the analysis, therefore, I rely fundamentally on this edition.⁴

¹ I prefer the expression ‘vertical interaction of the voices’ to the more usual ‘counterpoint’ for the reasons underlined by ROB WEGMAN in *What is counterpoint*, paper forthcoming (I wish to express my gratitude to the author for sharing his work with me prior to publication).

² Firenze, Biblioteca Medicea Laurenziana, ms. Pluteo 29.1, ff. 399-414v. For a detailed description of the manuscript, its date of compilation and its relationships with manuscript W₁ and W₂, see *Les Quadrupla et Tripla de Paris* 1993, pp. lxx-lxxi; BALTZER, 1972; WRIGHT 1989, pp. 243-258 and 267-272.

³ TISCHLER 1982, vol. I, nn° 37-76, 110-111, and 129.

⁴ I have checked every single reading of the manuscript, however, and also occasionally modified some of Tischler’s most idiosyncratic rhythmic interpretations.

Table 1 — Two-voice Motets in F, fasc. 9

F	Duplum	Tenor
399	Mens fidem seminat	In odo
399v	Doce nos hodie viam prudentiae	Doce
400	Doceas hac die viam patrie	Doce
400v	Ne sedeas sortis ad aleas	Et tenue
401v	Hostem superat et infernum reserat	Ta
401v	Salve mater fons hortorum	Ta
402	Crescens incredulitas fidem domuit	Go
402v	Rex pacificus unicus	Reg
403	Infidelem populum	Reg
403v	Deus omnium turba gentium	Reg
403v	Mundo gratum veneremur	Ad nu
403v	Ex semine abrahe divino	Ex semine
404	Letetur iustus gloriatur in domino	Spera
404	Christi via veritas et vita	Tori
404v	Deum querite deum totis viribus	Tes autem
404v	Tua glorificata deus opera	Do
405	Quia concupivit vultum	Quia concupivit rex
405	Non orphanum te deseram	Et gaudebit
405v]	Et exalta vi magna cor humilium	Et exalta
406	Si quis ex opere propriam laborat	Ta
406v	Mulieris marscens venter	Mulie
406v	Locus hic terribilis sacratus	Te
407	Alpha bovi et leoni	Domino
407v	In modulo sonet letitia	Latus
407v	Moriuntur oriuntur	In odorem
408v	Factum est salutare conspectu	Dominus
408v	Fidelis gratuletur populus	Sancto
408v	Audi filia egregia	Filia
409	Salve salus hominum cuius puerperium	Et gaudebit
409v	Clamans in deserto	Johan
410	Gaude Syon filia regis	Et Iherusalem
410	Prothomartir plenus fonte virtutis	Ne
410v	Exilium parat transgressio	In azimis sincerita
411	Veni salva nos lux inclita	Amo
411	Immolata paschali victima	Latus
413	Error popularis	Dominus
413v	Virtus est complacitis	Go
414	Liberator libera servos	Liberati
414	Virgo singularis respice quod quero	E

In my opinion, an analysis of the tonal organisation of Parisian motets should take into consideration:

- (1) the manner of selection of the Tenor *fundamentum* in relation to the modality of the chant of provenance;
- (2) the melodic contour of the added Duplum, in order to determine:
 - (a) whether it can be considered ‘modally oriented’, and
 - (b) whether this potential orientation is in agreement or in disagreement with the possible Tenor modality;
- (3) the vertical relationships between Tenor and Duplum at certain points of each composition, in order to verify whether they follow (or establish) any sort of polyphonic modality.

The rest of the essay will present a summary of the methodologies and results of the investigation. At the end, the gathered data will be compared with the main evidence of the previously mentioned analysis of the two-voice conductus repertoire, to sketch a broader – although still preliminary – picture of the tonal organisation of Gothic polyphony.

2. As said, the starting point of the analysis is the observation of the manner in which Gothic composers cut a melodic portion out of an entire chant in order to use it as a basis – normally – first for a clausula and then for a motet. In fact, thirteen motets out of thirty-nine add texts to discantus passages contained in organa of the manuscript F itself (eleven from two-part, and two, not using the Triplum, from three-part organa), and even more – twenty – coincide with clausulae transmitted separately in the fifth fascicle of F: so that only six motets appear today unrelated to the polyphonic organa repertoire. (The relationships between motets and clausulae and/or organa are summarised in Table 2; the immediate source of each motet is printed in bold in the appropriate column – ‘clausula’ or ‘organum’ – with reference to F foliation; a foliation number in square brackets identifies the six unrelated motets. In addition, the first three columns of the table provide the reference number of each motet respectively in Massimo Masani Ricci’s inventory of Pluteo 29.1 (MASANI RICCI 2002), Hendrik van der Werf’s *Integrated Directory of Organa, Clausulae and Motets* (WERF 1989), and Tischler’s *Earliest Motets*, while the last column on the right presents the complete chant text, with in italics the words or sections not set in polyphony).

Table 2 – F fasc.9: Two-voice Motets and Related Organa and Clausulae

Masani #	vdW #	Tischler #	F	Duplum	Tenor	Clausula	Organum
839	495	129	399	Mens fidem seminat	In odo	45 (a3)	M45 135 Alleluya. Dilexit Andream dominus in odorem suavitatis .
840	345	110	399v	Doce nos hodie viam prudentiae	Doce	163 # 1	M26 118 Alleluya. Paraclitus spiritus sanctus quem mittet pater in nomine meo ille vos docebit omnem veritatem .
841	344	37	400	Doceas hac die viam patrie	Doce	–	M26 118v Alleluya. Paraclitus spiritus sanctus quem mittet pater in nomine meo ille vos docebit omnem veritatem .
842	248	38	400v	Ne sedeas sortis ad aleas	Et tenue	–	M17 111v Alleluya. Surrexit dominus et occurrens mulieribus ait avete tunc accesserunt et tenuerunt pedes eius .
844	308	40	401v	Hostem superat et infernum reserat	Ta	161 # 1	M23 115v Alleluya. Ascendens cristus in altum captivam duxit captivitatem dedit dona hominibus .
845	309	41	401v	Salve mater fons hortorum	Ta	160v # 3	M23 115v Alleluya. Ascendens cristus in altum captivam duxit captivitatem dedit dona hominibus .
846	414	42	402	Crescens incredulitas fidem domuit	Go	11 #1 a3	M32 29 a3 Benedicta <i>et venerabilis es virgo Maria que sine tacto pudoris inventa es mater salvatoris</i> . Virgo dei genitrix quem totus non capit orbis in tua se claudit viscera factus homo .
847	442	43	402v	Rex pacificus unicus	Reg	167 # 1	M34 124v & 125v Alleluya. Hodie Maria virgo celos ascendit gaudete quia cum cristo regnat in eternum .
848	443	44	403	Infidelem populum	Reg	166 #7	M34 124v & 125v Alleluya. Hodie Maria virgo celos ascendit gaudete quia cum cristo regnat in eternum .
849	444	45	403v	Deus omnium turba gentium	Reg	166 #6	M34 124v & 125v Alleluya. Hodie Maria virgo celos ascendit gaudete quia cum cristo regnat in eternum .

Masani #	vdW #	Tischler #	F	Duplum	Tenor	Clausula	Organum
850	698	46	403v	Mundo gratum veneremur	Ad nu	–	O18 76v Ad nutum domini nostrum <i>ditantis honorem. Sicut spina rosam, genuit Iudaea Mariam.</i> Ut vitium virtus operiret gratia culpam. <i>Sicut... Gloria patri et filio et spiritui sancto. Sicut...</i>
851	483	111	403v	Ex semine abrahe divino	Ex semine	–	M38 129v Alleluya. Nativitas gloriose virginis Marie ex semine Abrahe orta de tribu Iuda <i>clara ex stirpe David.</i>
852	505	47	404	Letetur iustus glorietur in domino	Spera	–	M49 137v (138r-v) Alleluya. Letabitur iustus in domino et sperabit in eo et laudabuntur omnes <i>recti corde.</i>
853	516	48	404	Christi via veritas et vita	Tori	–	M51 139v Alleluya. Posui adiutorium super potentem et exaltavi electum <i>de plebe mea.</i>
854	487	49	404v	Deum querite deum totis viribus	Tes autem	–	M40 131 Timete dominum <i>omnes sancti eius quoniam nihil deest timentibus eum.</i> Inquirentes autem dominum non deficient <i>omni bono.</i>
855	490	50	404v	Tua glorificata deus opera	Do	168v #3	M41 131v Gloriosus <i>deus in sanctis mirabilis in maiestate faciens prodigia.</i> Dextera tua domine glorificata est in virtute dextera manus tua confregit <i>inimicos.</i>
856	529	51	405	Quia concupivit vultum	Quia concupivit rex	–	M54 141v Alleluya. Veni electa mea et ponam te in thronum meum quia concupivit rex speciem tuam.
857	322	52	405	Non orphanum te deseram	Et gaudebit	174v #2	M24 116 Alleluya. Non vos relinquam orphanos vado et venio ad vos et gaudebit cor vestrum.
858	518	53	405v	Et exalta vi magna cor humilium	Et exalta	177v #3	M51 139 Alleluya. Posui adiutorium super potentem et exaltavi electum <i>de plebe mea.</i>

D. Sabaino – Tonal Organisation in Some F-MS Two-Voice Motets

Masani #	vdW #	Tischler #	F	Duplum	Tenor	Clausula	Organum
859	310	54	406	Si quis ex opere propriam laborat	Ta	–	M23 115v (116r) Alleluya. Ascendens cristus in altum captivam duxit captivitatem dedit dona hominibus.
860	369	55	406v	Mulieris marscens venter	Mulie	–	M29 120v (120v-121r) Alleluya. Inter natos mulierum non surrexit maior Johanne <i>Baptista</i> .
861	110	56	406v	Locus hic terribilis sacratus	Te	–	<u>accord. to van den Werf's Directory</u> M12 107 (108) Alleluya. Adorabo ad templum sanctum tuum et confitebor <i>nomini tuo</i> . <u>however the cl. is actually related to</u> M51 139v Alleluya. Posui adiutorium super potentem et exaltavi electum <i>de plebe mea</i> <u>The two All. share the same cantus</u>
862	762	57	407	Alpha bovi et leoni	Domino		BD VI 42v a3 Benedicamus Domino .
863	233	58	407v	In modulo sonet letitia	Latus	158v #2	M14 109 Alleluya. Pascha nostrum immolatus est <i>cristus</i> .
864	498	59	407v	Moriuntur oriuntur	In odorem	–	M45 [135] Alleluya. Dilexit Andream dominus in odorem suavitatis .
865	43	60	408v	Factum est salutare conspectu	Dominus	149 #3	M1 99 & 99v Viderunt omnes <i>finis terre salutare dei nostri iubilate deo omnis terra</i> . Notum fecit dominus salutare suum ante conspectum gentium revelavit <i>iusticiam suam</i> .
866	697	61	408v	Fidelis grateletur populus	Sancto (= Domino BD I)	–	O16 75 (76) Stirps Iesse <i>virgam produxit virgaque florem. Et super hunc florem requiescit spiritus almus</i> . Virgo dei genitrix virga est flos filius eius. <i>Et super...</i> Gloria patri et filio et spiritui sancto . <i>Requiescit</i> . BD I 87v

Masani #	vdW #	Tischler #	F	Duplum	Tenor	Clausula	Organum
867	478	62	408v	Audi filia egregia	Filia	–	M37 [128] Propter veritatem <i>et mansuetudinem et iusticiam et deducet te mirabiliter dextera tua.</i> Audi filia et vide et inclina aurem tuam quia concupivit rex <i>speciem tuam.</i>
868	325	63	409	Salve salus hominum cuius puerperium	Et gaudebit	–	M24 [116v] Alleluya. Non vos relinquam orphanos vado et venio ad vos et gaudebit cor vestrum.
869	379	64	409v	Clamans in deserto	Johan	164v #1	M29 120v Alleluya. Inter natos mulierum non surrexit maior Johanne Baptista.
871	632	66	410	Gaude Syon filia regis	Et Iherusalem	147	O1 65 Iudea et Iherusalem nolite timere cras egrediemini et dominus erit vobiscum. Constantes estote videbitis auxilium domini super vos- <i>Cras... Gloria patri et filio et spiritui sancto. Et dominus...</i>
872	60	67	410	Prothomartir plenus fonte virtutis	Ne	151 #3	M3 101 Sederunt <i>principes et adversum me loquebantur et iniqui persecuti sunt me.</i> Adiuva me domine deus meus salvum me fac propter misericordiam <i>tuam.</i>
873	244	68	410v	Exilium parat transgressio	In azimis sincerita	–	M15 109v (110) Alleluya. Epulemur in azimis sinceritatis et veritatis.
874	360	69	411	Veni salva nos lux inclita	Amo	163 #1	M27 119v Alleluya. Veni sancte spiritus reple tuorum corda fidelium et tuis amoris in eis <i>ignem accende.</i>
875	234	70	411	Immolata paschali victima	Latus	158 #3	M14 109 Alleluya. Pascha nostrum immolatus est <i>cristus.</i>
877	44	72	413	Error popularis	Dominus	–	M1 [99 & 99v] Viderunt omnes <i>finis terre salutare dei nostri iubilare deo omnis terra.</i> Notum fecit dominus salutare suum ante conspectum gentium revelavit <i>iusticiam suam.</i>

Masani #	vdW #	Tischler #	F	Duplum	Tenor	Clausula	Organum
878	416	73	413v	Virtus est complacitis	Go	–	M32 [29 a3] Benedicta et venerabilis es virgo Maria que sine tacto pudoris inventa es mater salvatoris. Virgo dei genitrix quem totus non capit orbis in tua se claudit viscera factus homo.
879	96	74	414	Liberator libera servos	Liberati	–	M7 [103v] Anima nostra sicut passer erepta est de laqueo venantium. Laqueus contritus est et nos liberati sumus adiutorium nostrum in nomine domini qui fecit celum et terram.
880	655	75	414	Virgo singularis respice quod quero	E	88v #3 BD I	O16 75 Stirps Iesse virgam produxit virgaque florem. Et super hunc florem requiescit spiritus almus. Virgo dei genitrix virga est flos filius eius. Et super... Gloria patri et filio et spiritui sancto. <i>Requiescit.</i>

The thirty-nine motets have their roots in about twenty-seven or twenty-eight chants – this approximate figure is due to the melodic interrelationships between chants which result in some sharing or true cross-relations. On the former side, for example, the word *sancto* in O16 *Stirps Yesse* and the word *Domino* in BD I use the same melody. On the latter side, *Locus hic terribilis / TE* employs a chant segment (*confitebor*) from the *Alleluia. Adorabo* (M12) identical to another (*exaltavi*) from the *Alleluia. Posui adiutorium* (M51): so that the actual musical source of the motet is the substitution clausula related to M51 (*TA*), and not the discantus passage over *TE* from M12, while the Duplum text is undoubtedly connected to M12 both verbally and liturgically – verbally, because it ends with the word *confitebor*, the same from which the Tenor syllable *TE* was extracted; liturgically, because the text refers to a Church stability that results from *delere vitia*, to a purity which is well in tone with the performative occasion of the *Alleluia. Adorabo* at Notre-Dame de Paris, the feast of the Purification of the Virgin Mary (February 2nd) (WRIGHT 1989, p. 259).

The chants upon which the motets are based cover all the ecclesiastical modes but the sixth (I follow the readings of manuscripts Paris, Bibliothèque National, *lat. 15616* (Graduale) and *lat. 15181-15182* (Antiphonarium) as

edited in the appendix of the series *Le magnus liber organi de Notre-Dame de Paris*, voll. II, III, and IV).⁵ The mode of each chant is shown in Table 3.

Table 3 – Modes of chants related to F-fasc. 9 motets

Mode	Chants
1	M17 All. <i>Surrexit Dominus</i> M23 All. <i>Ascendens Christus</i> M24 All. <i>Non vos relinquam orphanos</i> M26 All. <i>Paraclitus Spiritus</i> M40 Grad. <i>Timete Dominum V. Inquirentes autem</i> M41 Grad. <i>Gloriosus Deus V. Dextera tua domine</i> M45 All. <i>Dilexit Andream</i> M54 All. <i>Veni electa mea</i>
2	O16 Resp. <i>Stirps Iesse</i> M27 All. <i>Veni sancte Spiritus</i> BD I
3	O18 Resp. <i>Ad nutum Domini</i>
4	O1 Resp. <i>Iudea et Iherusalem</i> M29 All. <i>Inter natos mulierum</i> M32 Grad. <i>Benedicta et venerabilis V. Virgo Dei genitrix</i>
5	M1 Grad. <i>Viderunt omnes V. Notum fecit Dominus</i> M3 Grad. <i>Sederunt principes V. Adiuva me Domine</i> M7 Grad. <i>Anima nostra V. Laqueus contritus est</i>
5 (transp. at C)	BD VI
7	M12 All. <i>Adorabo</i> M14 All. <i>Pascha nostrum</i> M15 All. <i>Epulemur in azymis</i> M49 All. <i>Laetabitur iustus</i> M51 All. <i>Posui adiutorium</i>
8	M34 All. <i>Hodie Maria Virgo</i> M37 Grad. <i>Propter veritatem V. Audi filia</i> M38 All. <i>Nativitas gloriosae virginis Mariae</i>

The question is now whether the very act of selecting a portion of chant maintains or frustrates the modal sense of the whole plainsong. According to Hans Tischler, the second horn of the dilemma should be considered the normal truth: «the tenors ... can be only rarely attributed unambiguously to one of the Church modes» (TISCHLER 1985, I, p. 180): a fact that in Tischler's opinion parallels the famous assertion of Johannes de Grocheo affirming that «cantus publicus et precise mensuratus ... tonis non subiciuntur» (ROHLOFF 1972, p. 152, § 219). In my opinion, however (even – purposely – not considering the opposite statement by the later Berkeley manuscript),⁶ things are not

⁵ *Les organa à deux voix pour l'Office* 2003; *Les organa à deux voix pour la Messe (de Noël à la fête de Saint-Pierre et Saint-Paul)* 2001; *Les organa à deux voix pour la Messe (de l'Assomption au Commun des Saints)* 2002.

⁶ «Restat et nunc quidam de cantibus aliis, puta motetis, baladis, et huiusmodi, de quibus tonis sive modis iudicandis fuerint aliqua declamare. Sit igitur finale iudicium omnium tonorum seu

so plain and simple. First of all, a Tenor can be fully modal, and the Tenor and Duplum taken as a whole contradict this modality, or even be absolutely non-modal. Second, it must be taken into account that the inner characteristics of the selected portion of chant may lead to a reinterpretation – and so to a new classification – of the modality of the fragment with respect to the modality of the complete chant. Third, the assignment of a chant fragment (or even of an entire chant) to one of the eight Church modal categories can be different according to different points of view. Of course, if the sole (or the main) determiner is the final note of the chant (or of the fragment), as stated by the rule «omnis cantus in fine dignoscitur» (a part of the procedure Bernhard Meier, in his fundamental book on modes in classical vocal polyphony, has labelled ‘ecclesiastical perspective’, as opposed to the ‘pseudo-classical perspective’ which deems each mode as a combination of a species of fifth and a species of fourth: MEIER 1988, pp. 36-46), there are no options: different ending notes signify different modes. On the contrary, if we consider other constituents such as formulas, melodic recurrences, *confinales*, and so on, the final result can be diverse. This is why the examination of how Notre-Dame composers operated in extracting Tenors from clear-cut modal chants is essential to our perspective.

The relationships between chant modes, final note of Tenor selections, and melodic range of the same selections are tabulated, motet by motet, in Table 4.⁷

Table 4 – F fasc. 9 motets: modes of chant, and *clausulae*-selection endings and *ambitus*

Masani #	vdW #	Tischler #	F	Duplum	Tenor	O/M/BD	Chant mode	Selection ending	Selection ambitus
839	495	129	399	Mens fidem seminat	In odo	M45 cfr # T59	1	C	C-c
840	345	110	399v	Doce nos hodie viam prudentiae	Doce	M26 cfr # T37	1	a	D-c
841	344	37	400	Doceas hac die viam patrie	Doce	M26 cfr # T110	1	G	D-c (b ₉)
842	248	38	400v	Ne sedeas sortis ad aleas	Et tenue	M17	1	D	D-e
844	308	40	401v	Hostem superat	Ta	M23 cfr # T41, 54	1	d	F-e
845	309	41	401v	Salve mater fons hortorum	Ta	M23 cfr # T40, 54	1	a	F-e
846	414	42	402	Crescens incredulitas	Go	M32 cfr # T73	4	D	D-b ₉

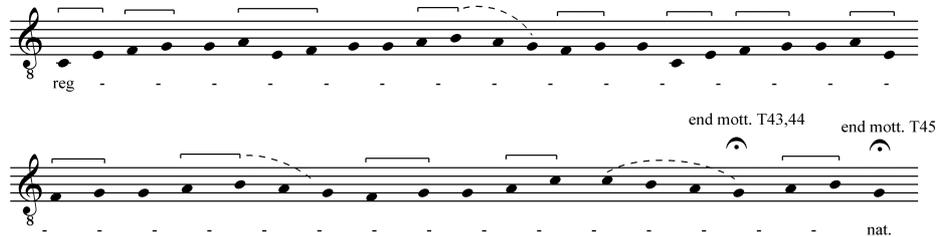
modorum cuiuslibet cantus, videlicet motetorum, baladarum, rondellorum, vireletorum, et huiusmodi istud»: *Tractatus de contrapuncto* 1984, p. 84.

⁷ In this and in the following tables, pitches are indicated by means of Guidonian letters.

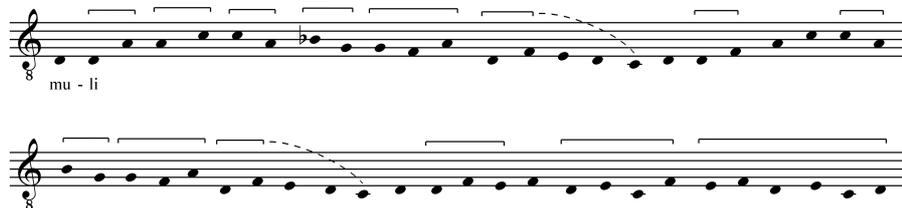
Masani #	vdW #	Tischler #	F	Duplum	Tenor	O/M/BD	Chant mode	Selection ending	Selection ambitus
847	442	43	402v	Rex pacificus unicus	Reg	M34 cfr #T44, 45	8	G	C-c
848	443	44	403	Infidelem populum	Reg	M34 cfr #T43, 45	8	G	C-c
849	444	45	403v	Deus omnium turba gentium	Reg	M34 cfr #T44, 45	8	G	C-c
850	698	46	403v	Mundo gratum veneremur	Ad nu	O18	3	(c =) F <i>transp. 5th below</i>	C-g
851	483	111	403v	Ex semine abrahe divino	Ex semine	M38	8	G	G-g
852	505	47	404	Letetur iustus	Spera	M49	7	G	G-g
853	516	48	404	Christi via veritas et vita	Tori	M51 cfr # T53, 56	7	G	F-d
854	487	49	404v	Deum querite deum totis viribus	Tes autem	M40	1	a	C-c (b ₂ /z)
855	490	50	404v	Tua glorificata deus opera	Do	M41	1	a	D-c (b ₂ /z)
856	529	51	405	Quia concupivit vultum	Quia concupivit rex	M54	1	D	C-d
857	322	52	405	Non orphanum te deseram	Et gaudebit	M24 cfr # T63	1	a	C-b,
858	518	53	405v	Et exalta vi magna	Et exalta	M51 cfr # T48, 56	7	G	F-f
859	310	54	406	Si quis ex opere propriam laborat	Ta	M23 cfr # T41, 42	1	a	F-e (b ₂ /z)
860	369	55	406v	Mulieris marscens venter	Mulie	M29 cfr. # T64	4	D	C-c (b ₂ /z)
861	110	56	406v	Locus hic terribilis sacratus	Te	M51 = M11 cfr # T48, 53	7	G	F-f
862	762	57	407	Alpha bovi et leoni	Domino	BD VI	5 (transp. at C)	C	C-d
863	233	58	407v	In modulo sonet letitia	Latus	M14 cfr # T70	7	(G =) C <i>transp. 5th below</i>	C-d
864	498	59	407v	Moriuntur oriuntur	In odorem	M45 cfr. # T129	1	D	C-c
865	43	60	408v	Factum est salutare conspectu	Dominus	M1 cfr # T72	5	c	F-f (b ₂ /z)
866	697	61	408v	Fidelis gratuletur populus	Sancto (= Domino)	O16 (= BD I) cfr # T75	2	D	A-G
867	478	62	408v	Audi filia egregia	Filia	M37	8	c	F-e (b ₂ /z)
868	325	63	409	Salve salus hominum	Et gaudebit	M24 cfr # T52	1	F (not from c.f.)	C-b,

Masani #	vdW #	Tischler #	F	Duplum	Tenor	O/M/BD	Chant mode	Selection ending	Selection ambitus
869	379	64	409v	Clamans in deserto	Johan	M29 cfr # T55	4	D	C-b (b ₂ /z)
871	632	66	410	Gaude Syon filia regis	Et Iherusalem	O1	4	E	D-a
872	60	67	410	Prothomartir plenus fonte	Ne	M3	5	c	F-e
873	244	68	410v	Exilium parat transgressio	In azimis sincerita	M15	7	d	c-aa
874	360	69	411	Veni salva nos lux inclita	Amo	M27	2	C	C-b,
875	234	70	411	Immolata paschali victima	Latus	M14 cfr # T58	7	(G =) C <i>transp. 5th below</i>	C-d
877	44	72	413	Error popularis	Dominus	M1 cfr # T60	5	c	F-f
878	416	73	413v	Virtus est complacitis	Go	M32 cfr # T42	4	a	D-b,
879	96	74	414	Liberator libera servos	Liberati	M7	5	(c =) F <i>transp. 5th below 2nd cursus varied</i>	D-b(₂)
880	655	75	414	Virgo singularis	E	O16 cfr # T61	2	D	A-G

Even a cursory glance at the table allows us to note that slightly less than half of the motets is built upon a Tenor which ends on exactly the same final as the entire chant, and so retains its modality (they are the motets whose Tenor final note is highlighted in bold). The majority of Tenors, in addition, moves in the same range as the complete chant, and thus also preserves the authentic *vs.* plagal nature of the melody (the only noticeable exception is *Ex semine abrahe / EX SEMINE*, whose *ambitus* seems to mark a shift from the global eight mode of *Alleluia. Nativitas* to the seventh of the Tenor excerpt: but this exception is only apparent, as the shift to the higher range affects already the entire Verse of the chant). This adherence to the mode of the chant of provenance is sometimes obtained by ending the Tenor selection not on the last note of the melisma of the syllable involved, but a few notes before (or after): see for example Ex. 1a, *Rex pacificus / REG*, and *Infidelem populum / REG*, which both close on G, two notes before the last pitch on *REG*, certainly to avoid a difficult-to-manage b₂ final; and see also Ex. 1b *Deus omnium turba gentium*, whose Tenor employs the same chant fragment, but extends the selection up to the syllable *NAT* of *regnat* (without mentioning it in the Tenor caption), in order to finish again on G, the *finalis* of the eight-mode chant). Of the remaining twenty motets which do not conclude the Tenor on the chant final, twelve finish on the most typical *confinalis* (the fifth in ten cases, and



Ex. 1 – M34 Alleluia. Hodie Maria Virgo / T#43, 44, 45



Ex. 2 – Alleluia. Inter natos mulierum / T#55



Ex. 3 – M32 Gr. Benedicta V. Virgo dei genitrix / T#42

the fourth – the *repercussiones* a and c – respectively in a fourth- and an eight-mode chant). These Tenor selections as well, then, can be said to maintain – or, at least, not to contradict – the basic modality of the chant. The motets that deny the chant mode, therefore, are only a minority (8, that is 20.5%). At least three of them, however, in my opinion do not withdraw from the modality of the plainsong, but rather reinterpret it according to the inner characteristics of the selected melodic fragment – see Exx. 2 and 3, which show how the particular excerpts from chant in mode 4 resemble (and sound as) melodies in mode 1 (the arch at the beginning of *MULIE* in Ex. 2, for instance, is almost identical to one of the possible forms of the most pervasive intonation formula of mode 1, while in *Crescens incredulitas / GO*, Ex. 3, D is also the final note of the *Benedicta* Gradual Verse *Virgo Dei genitrix*), and thus are appropriately considered as true D-mode *fundamenta*. It is also noteworthy that this modal reinterpretation concerns all but one chant in mode 3 and 4: that is, the modal final that is practically absent from the conductus repertoire (as well as from secular monophony).⁸ With it, the Phrygian and Hypophrygian modes became peripheral to this motet collection

⁸ SABAINO 2013 and TISCHLER 1999, p. 76.

as well, even though E-modes are in fact present in the reference chants (this ‘reinterpretation’ can be better defined as a true ‘neutralisation’ of E-finals – a neutralisation that saves only *Gaude Syon / ET IHERUSALEM*, perhaps the most archaic motet of the gathering, the only one containing a lengthy organal section that covers almost half of the length of the Duplum). Only five motets (13%), thus, seem to challenge more or less blatantly the mode of the original chant: in all five instances the modal rupture seems intentional (in *Mens fidem seminat / IN ODO*, and *Veni salva nos / AMO*, for example, not all the notes of the melisma on the chosen syllables are used, and in *Salve salus hominum / ET GAUDEBIT* even a final, extra note not present in the chant is added). It is not easy, however, to detect the reasons (if any) behind this intention. Sometimes (*Mens fidem*; *Doce nos hodie / DOCE*; *Salve salus*) one can imagine a will to differentiate the Tenor of a particular motet from others constructed on the same melisma, but in two or three cases it seems impossible even to speculate (we can only note – whatever it means for now – that no modal deconstruction ever affects G-finals, the most recurrent *finalis* in the conductus repertoire).

The percentage of modal correspondence between motet Tenors and related chants, therefore, appears to lead to the conclusion that modal considerations were – at the very least – not extraneous to the process of extracting portions of melodies from chants and using them as Tenors.

3. The second step of the analysis – the observation of the melodic contour of the Duplum voice – will be more rapid than the previous examination of Tenor selections. Even if it had any modal features, in fact, these would be less relevant for the whole than Tenor modality and Tenor/Duplum combination. This notwithstanding, however, the Duplum alone too is worthy of a quick glance at least from two points of view: its voice range (a modal constituent in chant as well), and the possible predictability of its main articulations and (especially) of its final note in relation to its *ambitus* (which in later stages of modality, such as in fifteenth and sixteenth polyphony, will become one of the most important markers of polyphonic modality) (MEIER 1988, pp. 123-170).

Table 5 expands table 4 giving, together with chant mode and Tenor final and range, the *ambitus* of each Duplum. In about half of the motets (often – and notably – when a G-chant sonority is involved), this range is in line with the explanations medieval chant theorists give about the relationship between mode finals and *ambitus* (POWERS – WIERING 2001) – too few cases to assert a modal relevance in the construction of the single parts, one must honestly conclude, but, at the same time, too many to deny it definitively. So, for now, let us just register the datum, and postpone its interpretation within a possible frame to a later stage of the analysis. What is worth noting as of now, instead, is the different Duplum range with respect to the Tenor one: which in most of the motets is not only larger (as could perhaps be expected), but also higher – something that differs significantly from conductus practice, as we shall see.

Table 5 – F fasc. 9 motets: ranges of Tenores and Dupla

Masani #	vdW #	Tischler #	F	Duplum	Tenor	O/M/BD	Chant mode	Tenor ending	Tenor ambitus	Duplum ambitus
839	495	129	399	Mens fidem seminat	In odo	M45 cfr # T59	1	C	C-c	F-f
840	345	110	399v	Doce nos hodie viam prudentiae	Doce	M26 cfr # T37	1	a	D-c	G-f
841	344	37	400	Doceas hac die viam patrie	Doce	M26 cfr # T110	1	G	D-c (b ₁)	D-f
842	248	38	400v	Ne sedeas sortis ad aleas	Et tenue	M17	1	D	D-e	G-f
844	308	40	401v	Hostem superat	Ta	M23 cfr # T41, 54	1	d	F-e	G-f
845	309	41	401v	Salve mater fons hortorum	Ta	M23 cfr # T40, 54	1	a	F-e	F-f
846	414	42	402	Crescens incredulitas	Go	M32 cfr # T73	4	D	D-b ₁	C-e
847	442	43	402v	Rex pacificus unicus	Reg	M34 cfr #T44, 45	8	G	C-c	C-d
848	443	44	403	Infidelem populum	Reg	M34 cfr #T43, 45	8	G	C-c	D-e
849	444	45	403v	Deus omnium turba gentium	Reg	M34 cfr #T44, 45	8	G	C-c	F-f
850	698	46	403v	Mundo gratum veneremur	Ad nu	O18	3	(c =) F <i>transp.</i> <i>5th below</i>	C-g	C-d
851	483	111	403v	Ex semine abrahe divino	Ex semine	M38	8	G	G-g	a-aa
852	505	47	404	Letetur iustus	Spera	M49	7	G	G-g	G-a
853	516	48	404	Christi via veritas et vita	Tori	M51 cfr # T53, 56	7	G	F-d	b-aa
854	487	49	404v	Deum querite deum totis viribus	Tes autem	M40	1	a	C-c (b ₁ /♯)	F-f
855	490	50	404v	Tua glorificata deus opera	Do	M41	1	a	D-c (b ₁ /♯)	F-f
856	529	51	405	Quia concupivit vultum	Quia concupivit rex	M54	1	D	C-d	C-e
857	322	52	405	Non orphanum te deseram	Et gaudebit	M24 cfr # T63	1	a	C-b ₁	F-g
858	518	53	405v	Et exalta vi magna	Et exalta	M51 cfr # T48, 56	7	G	F-f	G-aa
859	310	54	406	Si quis ex opere propriam laborat	Ta	M23 cfr # T41, 42	1	a	F-e (b ₁ /♯)	D-e
860	369	55	406v	Mulieris marscens venter	Mulie	M29 cfr # T64	4	D	C-c (b ₁ /♯)	D-d
861	110	56	406v	Locus hic terribilis sacratus	Te	M51 = M11 cfr # T48, 53	7	G	F-f	G-bb ₁
862	762	57	407	Alpha bovi et leoni	Domino	BD VI	5 (tr. at C)	C	C-d	D-d

D. Sabaino – Tonal Organisation in Some F-MS Two-Voice Motets

Masani #	vdW #	Tischler #	F	Duplum	Tenor	O/M/BD	Chant mode	Tenor ending	Tenor ambitus	Duplum ambitus
863	233	58	407v	In modulo sonet letitia	Latus	M14 cfr # T70	7	(G =) C <i>transp.5th below</i>	C-d	G-aa
864	498	59	407v	Moriuntur oriuntur	In odorem	M45 cfr # T129	1	D	C-c	D-e
865	43	60	408v	Factum est salutare conspectu	Dominus	M1 cfr # T72	5	c	F-f (b ₂ /z)	b ₂ -f
866	697	61	408v	Fidelis gratuletur populus	Sancto (= Domino)	O16 (= BD I) cfr # T75	2	D	A-G	D-d
867	478	62	408v	Audi filia egregia	Filia	M37	8	c	F-e (b ₂ /z)	G-a
868	325	63	409	Salve salus hominum	Et gaudebit	M24 cfr # T52	1	F (not from c.f.)	C-b ₂	G-f
869	379	64	409v	Clamans in deserto	Johan	M29 cfr # T55	4	D	C-b (b ₂ /z)	C-d
871	632	66	410	Gaude Syon filia regis	Et Iherusalem	O1	4	E	D-a	E-f
872	60	67	410	Prothomartir plenus fonte	Ne	M3	5	c	F-e	G-g
873	244	68	410v	Exilium parat transgressio	In azimis sincerita	M15	7	d	c-aa	a-bb(,)
874	360	69	411	Veni salva nos lux inclita	Amo	M27	2	C	C-b ₂	F-f
875	234	70	411	Immolata paschali victima	Latus	M14 cfr # T58	7	(G =) C <i>transp.5th below</i>	C-d	G-aa
877	44	72	413	Error popularis	Dominus	M1 cfr. # T60	5	c	F-f	G-bb ₂
878	416	73	413v	Virtus est complacitis	Go	M32 cfr. # T42	4	a	D-b ₂	D-g
879	96	74	414	Liberator libera servos	Liberati	M7	5	(c =) F <i>transp. 5th below 2nd cursus varied</i>	D-b(,)	D-d
880	655	75	414	Virgo singularis	E	O16 cfr # T61	2	D	A-G	D-d

Regarding the possible predictability of the articulations and final note of a Tenor with respect to its *ambitus* and contour, the question is more elusive, because it not only involves music grammar and style competence and interiorisation (as well as personal and often imponderable feelings and sensations), but may also depend on the chain of vertical relations with the Tenor. Posing such a question here, and not in the paragraph dedicated to the conjunct motion of Tenor and Duplum, however, in my opinion is not without its own sense. In fact, it is like posing the question whether motet voices were

created precisely (also) as self-contained melodies, or are mainly a sort of ‘obligate response’ to some contrapuntal stimuli, so to speak. After a close reading of the thirty-nine Dupla of F fascicle 9, my ears have the strong impression⁹ that a considerable amount of clausula/motet melodies has a good degree of *short-term predictability* of the next articulation (i.e., normally, the end of an *ordo* and its relative final pitch) which depends on (a) rhythm; (b) melodic sequences; (c) length of musical phrases, and (d) possible gap-filling procedures (in Leonard Meyer’s sense: MEYER 1956, 128 ff.) – compare, for example, Ex. 4 (high predictability, sense of melodic self-sufficiency) with Ex. 5 (low predictability, heavy dependence on vertical combinations). What they do have to a much lesser degree (or do not have at all), on the contrary, is *long-term* predictability: that is, the relationship between the overall musical motion of the voice and its final note (not to say between its initial and final sonorities, a predictability which does not exist in plainsong either). Something, probably, that does not bode well for a general modal interpretation of Duplum lines: but something, in addition, that might be advocated demonstrating that the art of creating measured melodies (that is, melodies not as free to wander around as chant ones) was a slow and long compositional conquest.

4. The last step of this investigation, as said at the beginning of the paper, is then the observation of the vertical relationships that Tenors and Dupla establish at certain points of their flowing, in order to verify if these coincidences are governed by any possible modal considerations. To do so, one has of course to determine previously which vertical coincidence can be considered significant for the purpose, and also to observe whether the final note is just a factual closure, or a true *finalis*, the result of a discernible process.

The final sonorities of the thirty-nine motets under examination are charted in Table 6a and summarised in Table 6b (the first letter in the column ‘sonority’ refers to the Tenor, the second to the Duplum). As can be immediately appreciated from the tabulations, the Parisian composers used as clausula/motet final sonorities not only the modal *finales* D, E, F, and G, but also – and in a percentage comparable to the most recurrent finals (D and G, while F is much less employed and E only residual) – the *confinales* C and A. More significantly, table 6a reveals also that there are very different kinds of relationship between final sonorities and chant modal finals: if the two coincide in the sole E-motet, and if the most part of A-ending motets retains a privileged association with first-mode chants (and, to a lesser extent, G-ending motets do the same with G-chant modes), in all F- and especially C- and D-ending motets the connection with the chants from which the Tenors were extracted varies from firm to loose to non-existent. This, however,

⁹ I underline the word *impression*, to distinguish the statement from other, more scientific, fact-based conclusions: but I believe in this field of study musically-formed personal opinions may well have their own right of citizenship.

cannot automatically be interpreted as evidence that (these) Parisian motets do not follow any modal path; it could well be, in fact, that they set up a new modal organisation, with no regard to the mode of the ‘mother’ chant, but at the same time consistent in itself. To see whether this is the case or not, therefore, the combined flows of the two voices – Duplum and Tenor – and their inner articulations must be observed.

1. Ex - i - li - um 2. pa - rat trans - gres - si - o; 3. re - fu - gi - um 4. dat Chri - sti pas - si - o. _____

5. Mun - da mun - dat nos ho - sti - a 6. vi - te pan - dens ho - sti - a. 7. Ex - i - ti - um 8. pa - rit

su - per - bi - a; 9. ve - i - a 10. dat re - me - di - um; 11. cul - pe iu - gum 12. pa - tris

e - li - mi - nat 13. gra - ti - a. 14. Mor - tem mors ex - ter - mi - nat, 15. dum mors in vi - tam

ger - mi - nat; 16. mors mor - tis fran - git iu - ra. 17. Gre - gem sa - nat mor - bi dum 18. pi - a pa - sto - ris

cu - ra; 19. sta - tum mu - tat lan - gui - dum 20. na - tu - ra. 21. E - ve gu - stum

quem fe - da - vit 22. vi - rus ho - sti - cum, 23. san - guis a - gni la - vit. 24. Plu - it man - na ce - li -

cum; 25. men - tes pa - scit a - zi - ma 26. nos sal - vans vict - ti - ma.

Ex. 4 – T#68, Duplum

1. Im-mo la - ta. 2. pa - scha - li vic - ti - ma 3. im - mo - le - tur a - ni - ma; 4. sit a - zi - ma, 5. sit

LA-

ex - pur - ga - ta, 6. re - pa - ra - ta 7. post ve - tus zi - ma 8. sa - lus pri - ma.

9. Ex - it di - e ter - ci - a, 10. ec - ce, Io - nas in - ti - ma 11. ven - tris an - gu - sti - a. 12. Fe-ra Io-seph

pes - si - ma 13. de - vo - ra - ta ge - li - ma 14. ad - o - ra - tur fra - ter - na; 15. post tres di - es in - fi - ma

16. ex - it de ci - ster - na. 17. Igne-a 18. re - mo ta rom phe - a 19. clau - stra si - de - re - a 20. a - pe - rit par - te

la - tus 21. per - fo - ra - tus, 22. ut fe - ne - stra - tus 23. ce - lo sit me - a - tus.

-TUS

Ex. 5 - T#70

Table 6a – F fasc. 9 motets: final sonorities

Masani #	vdW #	Tischler #	F	Duplum	Tenor	O/M/BD	Chant mode	Final sonority	Final quality
865	43	60	408v	Factum est salutare conspectu	Dominus	M1 cfr # T72	5	C _{unison}	C
867	478	62	408v	Audi filia egregia	Filia	M37	8		
872	60	67	410	Prothomartir plenus fonte	Ne	M3	5		
877	44	72	413	Error popularis	Dominus	M1 cfr. # T60	5		
863	233	58	407v	In modulo sonet letitia	Latus	M14 cfr # T70	7(tr-5)	C-c	
875	234	70	411	Immolata paschali victima	Latus	M14 cfr # T58	7(tr-5)	C-c	
839	495	129	399	Mens fidem seminat	In odo	M45 cfr # T59	1	C-G	
862	762	57	407	Alpha bovi et leoni	Domino	BD VI	5(tr+4)		
874	360	69	411	Veni salva nos lux inclita	Amo	M27	2		
846	414	42	402	Crescens incredulitas	Go	M32 cfr # T73	4	D _{unison}	
860	369	55	406v	Mulieris marscens venter	Mulie	M29 cfr # T64	4		
866	697	61	408v	Fidelis gratuletur populus	Sancto (= Domino)	O16 (= BD I) cfr # T75	2		
880	655	75	414	Virgo singularis	E	O16 cfr # T61	2		
873	244	68	410v	Exilium parat transgressio	In azimis sincerita	M15	7	du	
842	248	38	400v	Ne sedeas sortis ad aleas	Et tenue	M17	1	D-a	
856	529	51	405	Quia concupivit vultum	Quia concupivit rex	M54	1		
864	498	59	407v	Moriuntur oriuntur	In odorem	M45 cfr # T129	1		
869	379	64	409v	Clamans in deserto	Johan	M29 cfr # T55	4		
871	632	66	410	Gaude Syon filia regis	Et Iherusalem	O1	4	E-e	E
879	96	74	414	Liberator libera servos	Liberati	M7	5(tr-5)	F _{unison}	F
850	698	46	403v	Mundo gratum veneremur	Ad nu	O18	3(tr-5)	F-c	
868	325	63	409	Salve salus hominum	Et gaudebit	M24 cfr # T52	1		
847	442	43	402v	Rex pacificus unicus	Reg	M34 cfr #T44, 45	8	G _{unison}	G
848	443	44	403	Infidelem populum	Reg	M34 cfr #T43, 45	8		

Masani #	vdW #	Tischler #	F	Duplum	Tenor	O/M/BD	Chant mode	Final sonority	Final quality		
849	444	45	403v	Deus omnium turba gentium	Reg	M34 cfr #T44, 45	8	G-d			
841	344	37	400	Doceas hac die viam patrie	Doce	M26 cfr # T110	1				
844	308	40	401v	Hostem superat	Ta	M23 cfr # T41, 54	1				
851	483	111	403v	Ex semine abrahe divino	Ex semine	M38	8				
852	505	47	404	Letetur iustus	Spera	M49	7				
853	516	48	404	Christi via veritas et vita	Tori	M51 cfr # T53, 56	7				
858	518	53	405v	Et exalta vi magna	Et exalta	M51 cfr # T48, 56	7				
861	110	56	406v	Locus hic terribilis sacratus	Te	M51 = M11 cfr # T48, 53	7				
840	345	110	399v	Doce nos hodie viam prudentiae	Doce	M26 cfr # T37	1			a _{unison}	A
845	309	41	401v	Salve mater fons hortorum	Ta	M23 cfr # T40, 54	1				
854	487	49	404v	Deum querite deum totis viribus	Tes autem	M40	1				
855	490	50	404v	Tua glorificata deus opera	Do	M41	1				
859	310	54	406	Si quis ex opere propriam laborat	Ta	M23 cfr # T41, 42	1				
857	322	52	405	Non orphanum te deseram	Et gaudebit	M24 cfr # T63	1	a-e			
878	416	73	413v	Virtus est complacitis	Go	M32 cfr. # T42	4				

Table 6a – F fasc. 9 motets: final sonorities, summary

Final sonority		Final quality		
quantity	sonority	quality	quantity	%
4	C _{unison}	C	9	23
3	C-c			
2	C-G			
4	D _{unison}	D	9	23
1	d _n			
4	D-a			
1	E-e	E	1	2.5
1	F _{unison}	F	3	7.8
2	F-c			
3	G _{unison}	G	10	25.7
7	G-d			
5	a _{unison}	A	8	18
2	a-e			

For this, it is necessary to decide on which vertical combinations to focus our analytical attention (that is, to find out which are the main articulations of the two voices taken together). In the conductus repertoire, this operation was relatively simple: the structurally coinciding ending of each textual segment in the two voices allowed an adequate number of meaningful units to be isolated without any forcing of the vertical texture (SABAINO 2013, p. 291). In the case of motets, instead, the issue is more complicated, because the relationships between the voices are more complex and multifaceted, and the points of possible articulation of the melodic flows more sparse (with ‘articulation of the melodic flow’ I mean the points where each part, at the end of one or more verse(s) in the Duplum, or of an ordo in the Tenor, arrives at the conclusion of a (verbo)-melodic segment, and which are followed by a pause, a *suspirium* or a *divisio modi*). In fact, in some motets the vertical alignments of such articulations in the two voices are perfectly synchronised, leading to an obvious analytical segmentation. In others, such vertical alignments are less frequent: happening, for example, every two or three Tenor *ordo* endings. In still others, the conclusion of a Tenor phrase systematically matches the beginning of a Duplum one (or vice versa), in an interlock that can sustain a section (typically, a *cursus* of a Tenor melody) or even an entire composition. Finally, in a tiny percentage of pieces, vertically coinciding articulations in Tenor and Duplum are extremely sporadic and do not seem to obey any preconceived or otherwise recognisable scheme. In my opinion, therefore, such different types of articulations (which can coexist in a single composition, even though each motet – or at least each Tenor *cursus* – tends to

employ only one of them) should also ‘weigh’ differently in the evaluation of their ‘articulation power’ (as it were), as well as, accordingly, of their possible modal influence (either in a positive or a negative sense – that is, either to confirm or deny a possible modal conception of each piece, underneath or on the surface of the whole). In particular, I believe (1) that the word and concept of ‘cadence’¹⁰ should be reserved to the first category of vertical articulations, the ones where Tenor and Duplum reach the end of a phrase together, and (2) that, when no cadences can be detected, the horizontal articulations of the Duplum, and not those of the Tenor, should be considered analytically significant.

On these bases, I have scrutinised the motet repertoire of the ninth fascicle of F and produced a basic ‘sonic map’ of every piece (two of these maps are given, as examples, at the bottom of Exx. 6 and 7: the first concerns a motet highly articulated and with a cadence at the end of each verse/*ordo*, the second a motet with almost no coincidental articulations and thus with no cadence except at the end of the first *cursus* and on the last sonority; cadences are labelled tabulating the second-last and last sonority connected by the symbol of strict inequality ‘greater than’ [$>$], other articulations only by the interval between Tenor – the first letter – and Duplum – the second letter).

The analysis revealed, beyond any reasonable doubt, that there is no relationship between the chain of articulations of each motet, the melodic contour of each part, and the final sonority of each of the compositions. This means, in conclusion, that the vertical organisation of (these) motets is not regulated by modal considerations, but uniquely by the force of the vertical interaction of the two voices.

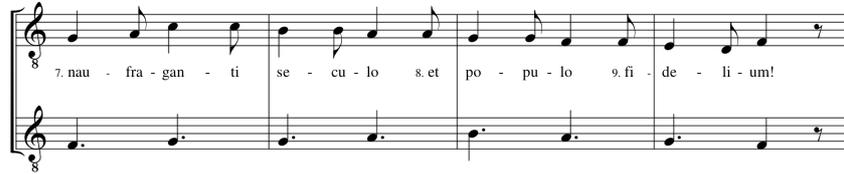
1. In - fi - de - lem po - po - lum! 2. Ha - man ad pa - ti - bu - lum 3. su - spen - di - tor pro - pri - um.

4. Ap - pre hen - de gla - di - um; 5. fran - ge ma - nus ho - sti - um; 6. ve - ni in au - xi - li - um.

(cont.)

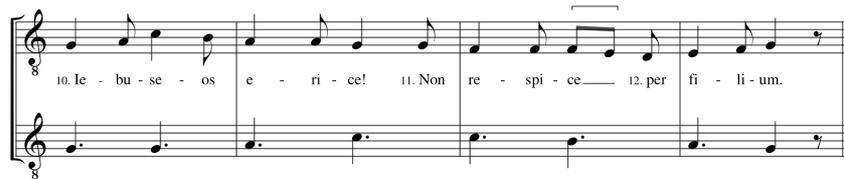
¹⁰ The word is surely anachronistic at this stage of *Ars Antiqua* polyphony, but I believe it can be used conventionally, to indicate here as well the coinciding vertical articulations of the two voices.

D. Sabaino – Tonal Organisation in Some F-MS Two-Voice Motets



7. nau - fra - gan - ti se - cu - lo 8. et po - pu - lo 9. fi - de - li - um!

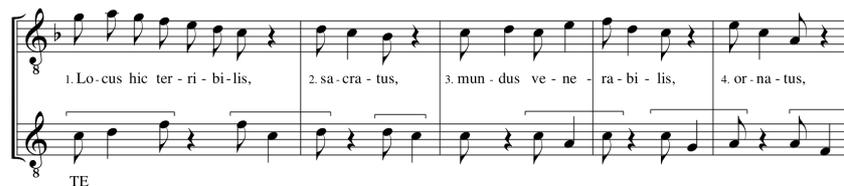
a tone higher in the ms; emendation from the subst. clausula



10. le - bu - se - os e - ri - ce! 11. Non re - spi - ce 12. per fi - li - um.

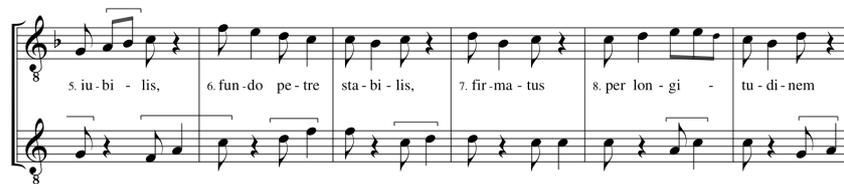
Sonic map: $3 > G_u / 3 > F_u / 3 > b_u / 3 > G_u / E_a > F_c^{pl} / a_u > E_b / G_D > F_u / 3 > G_u$

Ex. 6 – T#44



1. Lo - cus hic ter - ri - bi - lis, 2. sa - cra - tus, 3. mun - dus ve - ne - ra - bi - lis, 4. or - na - tus,

TE

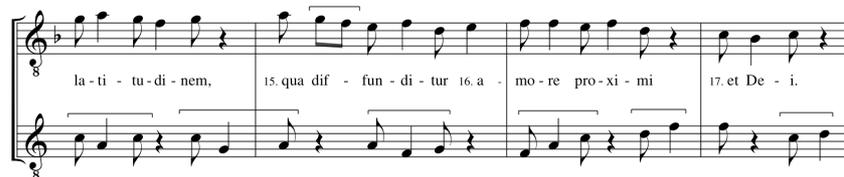


5. iu - bi - lis, 6. fun - do pe - tre sta - bi - lis, 7. fir - ma - tus 8. per lon - gi - tu - di - nem



9. ten - di - tur 10. fi - de - i, 11. per al - ti - tu - di - nem 12. e - ri - gi - tur 13. spe - i, 14. ha - bens

II.



la - ti - tu - di - nem, 15. qua dif - fun - di - tur 16. a - mo - re pro - xi - mi 17. et De - i.

(cont.)

Sonic map: fc / db_b / c_u / a_u / Fc / c_u / c_u / Gd / Gc / cd > c_u / cg / d_u / c_u / caa > cg / 3 > Gd

Ex. 7 – T#56

5. To sum up, then:

- The Tenor material is modal; the manner of subdividing the portion of chant to be used as Tenor in the majority of cases does not destroy (on the contrary, normally maintains) the modal substance of the chant, not only as the final note is concerned, but also with regards to other chant-modal parameters such as range, general outline, formulas, etc. This conclusion – at least for this collection of motets – differs from Tischler’s opinion which states that «by employing short portions of chants as cantus firmi, the modal properties of the complete tunes are obviously disregarded» (TISCHLER 1985, I, p. 183).
- The melodic contour of the added voice – the Duplum – in half of the cases can be considered in line with Tenor modality and in the other half cannot – a non-diriment situation, but still something more than Tischler’s other observation according to which «it is mere coincidence ... when an upper part seems to conform to the apparent mode of the tenor and its ambitus» (TISCHLER 1985, I, p. 180), as 50% of conformation can hardly be considered just a mere ‘coincidence’.
- The vertical organisation of Duplum and Tenor, finally, seems to disregard modal regulations and be guided only by vertical combinations, explorations, and elaborations.

Having given these data, it is surely of some interest to compare them with the results of the analysis of two-voice conductus repertoire.

6. The following elements can be compared between the two genres: (a) final sonorities; (b) ranges of pars; (c) cadences, and (d) overall tonal organisation.

In conducti the prevalent final sonorities were D (slightly more than one in four – the exact percentage is shown in Table 7¹¹), and especially G (almost

¹¹ The conducti figures come from SABAINO 2013, Table 1 (pp. 293-298).

three in four compositions); F was very rarely used; E and A are absolutely residual (one case for each of them out of one hundred and thirty-three), and C was not employed at all. For composing two-part conducti, then, there was clearly a favourite general sonority – especially in the Parisian environment: the figures change considering the conductus repertoire transmitted only in manuscripts of non-Parisian provenance, where a few C finals also make their appearance.¹² In the two-voice motets of F, fasc. 9, the picture is different: C, D, and G finals are used almost in the same percentage, A-compositions also recur rather frequently, and only E is equally negligible (the actual number of E-motets is one, as for the conducti). Is there a possible reasons behind the broader spectrum of finals in the motets? In my opinion, if there is any, it should have something to do with the (deliberate) maintenance of the general modal outlines of chants mentioned above.

Table 7 – Final sonorities (%) in conducti and motets

Final sonority	Conducti (% on 133 comp.)	Motets (% on 39 comp.)
C	0.0133	23.0
D	26.4	23.0
E	0.7	2,5
F	3.7	7.8
G	68.5	25.7
A	0.7	18.0

Some differences can also be observed as far as vocal ranges are concerned. In the conducti, the two parts share the same *ambitus*, and the plagal one – that is, the range moving from some notes below the final sonority up to about the fifth or sixth above it – seems not to be used in isolation, but rather employed only together with the corresponding authentic. In fact, in conducti two types of ranges exist: a ‘reduced’ one, more or less corresponding to what in modal terms is the authentic range, and an ‘extended’ one, comprehensive of both the plagal and the authentic modal *ambitus*. In the motets under consideration, on the contrary, the Duplum range not only tends to be slightly higher and larger than the Tenor one, but often maintains also the duality authentic/plagal as does the Tenor.

Conducti, in addition, appear to display more recognisable and structured cadential patterns than motets. In general, proper cadences (as we have seen) are more frequent in conducti than in motets because of the already mentioned wide-ranging voice interrelationships and interlocks, which result in a reduced number of coinciding endings of musical phrases.

The rules of vertical combination are of course the same in the two genres. In conducti, however, both voices can act (and actually do act) as the leading

¹² Cfr. SABAINO 2013 Tables 4 and 5 (pp. 301 and 302).

voice (a sign of a probable simultaneous composition), while in motets the leading voice is the Duplum almost by definition (although the overall structure of the piece depends on Tenor ordination). As the final consonance, however, motets employ the interval of a fifth almost twice as much as conducti (43% and 23%, respectively), and consequently finish much less frequently on the unison (47% against 71%), while in both genres an ending on the octave is relatively – and equally – rare (10% in motets and 7% in conducti).

The vertical interaction of the voices, finally, – and not modality – is the engine of the melodic flow as well as of the vertical relationships between the voices in both conducti and motets (motets, in particular, seems to confine any possible modal attention to working out Tenors and – in half of the examined motets – to some melodic features of Dupla). This notwithstanding, however, conducti display a characteristic that may call into play modal considerations for their vertical dimension as well. Nearly half of the cadences at the end of verses, in fact, are on the same degree as the last sonority of the piece: an element, for sure, that brings to the surface the evidence that conducti and motets obey different compositional logics; an element, however, that also reinvigorates (and corroborates) the idea that a modal substance, if it does not fully govern, surely lies behind conductus composition more than it does motet constitution.

7. This last statement, I am aware, may appear paradoxical as a conclusion. The ‘free’ conducti – compositions which normally have no relation whatsoever with pre-existing chant (something surely noticeable in most of their melodic flow) – would be more reminiscent of the modal categories of the theoretical Church tradition than motets (and related clausulae), which have their very roots precisely in pre-existent, unquestionably modal material. Paradoxical as it may be, however, I believe this is the path where the analyses carried out up to this point lead our discourse, and therefore I dare propose it as a legitimate – albeit perhaps provisional – point of arrival.

Is there any possible explanation for this apparent paradox? One possibility is that the musical minds of Gothic composers were so embedded in the modal (chant) tradition that producing music (new as it may be) that completely disregarded it was almost unattainable, not to say truly impossible; working with pre-existing material, on the contrary, could have been a somehow more ‘combinatorial’ operation, so to speak, an operation more interested in exploring varied and differentiated relationships with a given melody than in drawing possible consequences from an obvious modal substance. But this, of course, is just a hypothesis that only further research will be able to confirm or refute.¹³

¹³ An earlier and shorter version of this essay was read at the International Ars Antiqua Conference “*Cantum pulchriorem invenire*” (University of Southampton, 9-11 October 2013).

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Daniele Sabaino è professore di Modalità e di Notazione medievale presso il Dipartimento di Musicologia e beni culturali dell'Università di Pavia/Cremona. Ha pubblicato saggi di taglio filologico, storico e analitico sulla musica dal Medioevo al Seicento, su Juan Caramuel Lobkowitz e sui rapporti tra musica e liturgia nella storia e nell'attualità.

Daniele Sabaino is professor of Modality and Medieval Notation at the Department of Musicology and Cultural Heritage of the University of Pavia/Cremona. He has published historical, philological and analytical essays on music from the Middle Ages to the 17th century, on Juan Caramuel Lobkowitz and on past and present relationships between music and liturgy.