

Compositional Process in the Fifteenth-Century Motet

An annotation at the end of Richard Davy's motet *O Domine celi terrene creator* in the Eton Choirbook tells us that this piece was written in one day while the composer resided at Magdalen College, Oxford.¹ There is no obvious reason to disbelieve this contemporary report, yet it does seem quite unbelievable. The work in question takes up more than fifteen minutes in performance, and it involves five widely-spaced voice-parts that engage in counterpoint of extraordinary prolixity and intricacy.² So breathtaking is the motet in its handling of choral sonority, and its control of long-term pacing, that it seems hard to imagine that one man could have gotten all this just right within less than twenty-four hours. All in a day's work.

So, how did he do it? What did this one day in Magdalen College look like? If we could have stopped by after about an hour, what could Davy have shown us of his work in progress? By lunch-time, how far would he have come? It may seem frivolous to ask such questions, for we are plainly not going to find the evidence to answer them in this concrete case. Still, one can make an educated guess, and that is what I propose to do in the following contribution. There has, of course, been a great deal of interest in compositional process among Renaissance scholars, and Jessie Ann Owens has brought the subject to a magisterial summation in her book *Composers At Work*.³ Owens' study, however, relies mostly on evidence from sixteenth-century Italy: the question is how much of that evidence can be taken to apply to English music of around 1500.

1. 'Hanc antiphonam composuit Ricardus Davy uno die collegio magdalene Oxoniis'; *The Eton Choirbook*, ed. F. Ll. Harrison, 3 vols (Musica Britannica, 10–12; London, 1967–73), ii, pp. 181–2. The motet is edited *ibid.*, 62–72. Davy was active at Magdalen College, Oxford, from approximately 1483 to 1494.
2. Richard Davy's *O Domine celi terrene creator* is available on two recent sound recordings: The Sixteen, dir. H. Christophers, *Music from the Eton Choirbook III: The Pillars of Eternity*,

Collins Classics compact disc 13422 (1992), track 1, and The Cardinal's Musick, dir. A. Carwood, *Music at All Souls, Oxford: The Lancastrians to the Tudors*, ASV digital CD GAU

196 (2000), track 8. Timings for the motet are 15:11 and 15:02, respectively.

3. J. A. Owens, *Composers at Work: The Craft of Musical Composition 1450–1600* (New York, 1997).

In the early 1470s, Johannes Tinctoris famously complained that English musicians continued to use one and the same manner of composition, whereas the French composed new music for the new times.⁴ According to this contemporary observer, then, there was a distinctly English *compositio*, a distinct style of composition. It is quite possible, even likely, that the difference between English and Continental music pertained to compositional process as well as to musical style: certainly the Eton motets are worlds apart, stylistically, from motets written in Italy and France around the same time. So it is not self-evident that English composers necessarily conceived and worked out their motets in the same manner as their Continental counterparts.

There is also other evidence to take into account. In my recent study *The Crisis of Music in Early Modern Europe*, I have shown that English writers continued to use the word *cantus fractus* for motets like those in the Eton Choirbook, long after the same word had become an archaism on the mainland.⁵ Strictly speaking, *cantus fractus* refers to all vocal music that moves in discrete, measured rhythms – as opposed to the unmeasured notes of plainsong (or simple polyphony). The defining criterion of this term, in other words, is rhythm. As I have argued in *The Crisis*, musical debates in England were centrally occupied with rhythm, and especially concerned with the danger of using note-values too small to be distinguished by the ear. Music like that of Davy's motet would have been called 'prick-song' in the vernacular, which was routinely translated in Latin texts as *cantus fractus*.

Debates on the Continent, on the other hand, at least after the 1470s, revolved not around rhythm but *sound* – what it is, how it affects you, what its benefits and dangers are. On the Continent one would have called a motet a *cantus compositus* or *compositio*, music that is literally 'put together' in writing.⁶ Once again there is an implied distinction with plainchant, but the defining difference, in continental Europe, is not rhythm but the number of voice-parts – one in plainchant, more than one in *compositio*. Musical debates were concerned with the question whether additional voice-parts added anything more to plainchant than 'mere' sound alone. How odd that two coeval musical cultures should have thought of counterpoint on such different terms: one speaks of music as 'broken up', and the other as 'put together': lumpers on one end of the Channel, splitters on the other. This difference suggests that Italian texts may not be ideally representative of the peculiar ways of the English.

4. 'At this time, consequently, the potential of our music has undergone such a marvellous increase that it appears to be a new art, the wellspring of which new art, if I may so call it, is held to be among the English, among whom Dunstable stood forth as the leader. Contemporary with him in France were Dufay and Binchois, to whom directly succeeded those of today, Ockeghem, Busnoys, Regis, and Caron, who are the foremost in composition of all I have heard. Nor can the English, who are popularly said to jubilate while the French sing, bear comparison with them. For the French invent songs in the newest manner for

the new time, while *the English always use one and the same [manner of] composition, which is a sign of the poorest talent.*' Trans. after R. C. Wegman, 'Johannes Tinctoris and the "New Art"', *Music & Letters*, 84 (2003), pp. 171–88, at pp. 181–2.

5. R. C. Wegman, *The Crisis of Music in Early Modern Europe, 1470–1530*

(New York, 2005), esp. pp. 151–2, 157–60, and 225 n.157.

6. For this term, and its overtones in Continental musical culture after about 1470, see R. C. Wegman, 'From Maker to Composer: Improvisation and Musical Authorship in the Low Countries, 1450–1500', *JAMS*, 49 (1996), pp. 409–79.

To find out more about those English ways, I would like to begin this enquiry by focusing a little more on that curious term *cantus fractus*. What, exactly, is being broken up here? There are plenty of theorists who are happy to tell us: it is the whole notes of plainchant notation, notes that were usually written in square note-shapes. To break up those notes was a practice roughly analogous to what we would call ornamentation. That is to say, one preserved the broad contours of the chant, but the chant notes themselves were embellished with a proliferation of ornamental notes. Here is how Thomas Morley describes the practice in his *Plaine and easie introduction to practicall musicke* of 1597:⁷

Master. But because I promised you to set downe a waie of breaking the plainsong ... I will giue you an example out of the works of M. [Osbert] *Persley* (wherewith wee will content our selues at this present, because it had beene a thinge verie tedious, to haue set downe so manie examples of this matter, as are euerie where to be founde in the workes of M. *Redford*, M. *Tallis*, *Preston*, *Hodgis*, *Thorne*, *Selbie*, and diuers others: where you shal find such varietie of breaking of plainsongs, as one not verie well skilled in musicke, should scant descerne anie plainsong at al) whereby you may learn to break any plainsong whatsoever.

Philomathes. What generall rules haue you for that?

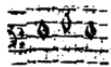
Master. One rule, which is euer to keepe the substance of the note of the plainsong.

Philomathes. What doe you call keeping the substance of a note?

Master. When in breaking it, you sing either your first or last note in the same key wherin it standeth, or in his eight [octave].

Philomathes. I praie you explaine that by an example.

Master. Here be three plaine song notes



which you may breake thus:



thus:



or thus:



and infinite more waies . . .

7. T. Morley, *A plaine and easie introduction to practicall musicke* (London, 1597), pp. 96–7.

A composer or singer who applied this practice did, however, cross a major conceptual line. Throughout the later Middle Ages, music moving in measurable rhythms was taken to smack dangerously of the secular world, and for that reason it was not tolerated, for example, in monasteries.⁸ In England, monks were allowed to sing polyphony in moderation, but only on the strict condition that no notes ever be broken.⁹ Everything had to move in unmeasured notes, plainchant and counterpoint alike.

The result of this latter practice is what we would call note-against-note counterpoint, or simple polyphony – which is indeed found primarily in the liturgical books of monastic orders.¹⁰ Music of this kind is best thought of as a mode of performance, rather than composition in the modern sense: simple polyphony was nothing but plainchant performed with a little euphony.¹¹ So long as all sounds remained unmeasured, no conceptual line was crossed, and no rules of decorum transgressed. If simple polyphony was ever written down, it usually looked somewhat like the illustration in Figure 1: three parts notated in score, all of them in plainchant notation. Of the three parts in this score, the middle part represents the plainchant, the ‘Pleni sunt celi’ from the Mass *De Angelis*, illustrated in Example 1a. Example 1b shows the same three-part counterpoint rendered in a modern transcription.

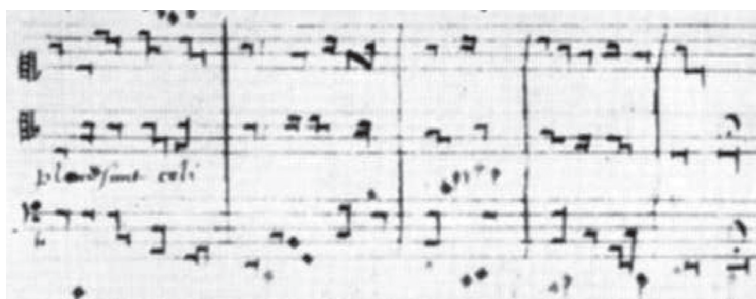
8. Wegman, *The Crisis of Music*, pp. 17–20 and 30–39.

9. *Ibid.*, pp. 157–9.

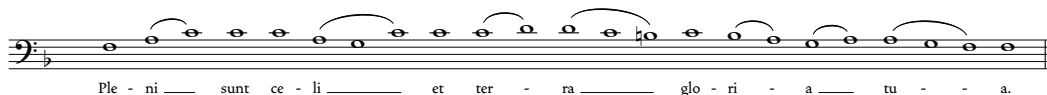
10. Literature on simple polyphony is vast. The starting point for this exceedingly important subject is the collection of essays entitled *Le Polifonie primitive in Friuli e in Europa: atti del congresso internazionale Cividale del Friuli, 22–24 agosto 1980*, ed. C. Corsi and P. Petrobelli (*Miscellanea musicologica*, 4; Rome, 1989).

11. Wegman, *The Crisis of Music*, pp. 30–32.

Figure 1. ‘Pleni sunt celi’, three-part simple counterpoint in plainchant notation, arranged in score, from Scottish Anonymous (LonBL Add. 4911, fol. 88r).



Example 1a. 'Pleni sunt celi', from Mass *De Angelis* (*Liber Usualis*, p. 39).



Example 1b. 'Pleni sunt celi', three-part simple counterpoint from Scottish Anonymous (cf. Figure 1).

Musical notation for Example 1b, showing three-part simple counterpoint in bass clef with lyrics: Ple - ni sunt ce - li et ter - ra glo - ri - a tu - a.

After J. D. Maynard, 'An Anonymous Scottish Treatise on Music from the Sixteenth Century, British Museum, Additional Manuscript 4911: Edition and Commentary', 2 vols (Ph.D. dissertation, Indiana University, 1961), II, pp. 258-81.

12. For this and what follows, see J. D. Maynard, "Heir Beginniss Countering", *JAMS*, 20 (1967), pp. 182-96. For the text of the Scottish Anonymous treatise, see J. D. Maynard, 'An Anonymous Scottish Treatise on Music from the Sixteenth Century, British Museum, Additional Manuscript 4911: Edition and Commentary', 2 vols (Ph.D. diss., Indiana University, 1961), ii, pp. 258-80, available online on http://www.chmtl.indiana.edu/tme/16th/SCOTA3B3_TEXT.html (accessed 9 Sept. 2007).

Now, this sort of music may have been appropriate for monks, and was probably quite beautiful in its own way, but for the rest of us it is positively crying out to be broken up. The art of doing this was known in England as 'countering'.¹² One Eton composer, William Horwood, is known to have taught this very art to his choirboys, and the practice can be documented as far back as the early fifteenth century. Unfortunately, the only known treatise to tell us about countering was written in Scotland around 1570, almost a century after the period that concerns us. It is this treatise, known as the Scottish Anonymous, from which the picture in Figure 1 was taken. After giving that example the anonymous theorist goes on to show how one can break up the whole notes of a simple counterpoint while leaving the plainchant itself intact. Example 2 shows his musical end result: the same three-part 'Pleni sunt celi,' but now in ornate counterpoint over a slow-moving cantus firmu.

Example 2. 'Pleni sunt celi', in Scottish Anonamous: ornate rendering of

1

2

3

6

11

16

22

Pleni sunt celi
 et terra
 gloria tua.

There are several things to note about this musical example. First of all, the music is, of course, highly florid. Example 3 gives a comparison between the top voice in its original whole notes (cf. Example 1a), and the same voice broken up into *cantus fractus* (cf. Example 2). The latter voice is so richly ornamented that it seems doubtful that one could securely reconstruct the original tune from this elaboration alone.

Example 3. Top voice of 'Pleni sunt celi', in Scottish Anonymus, comparison between simple version (from Example 1b) and version 'broken' according to the rules of counterpoint (from Example 2).

The musical score consists of five systems, each with two staves. The top staff in each system shows the simple version of the top voice, consisting of whole notes. The bottom staff shows the 'broken' version, which is highly ornamented with many eighth and sixteenth notes. Asterisks (*) are placed above certain notes in the 'broken' version to indicate ornaments. The systems are numbered 1, 7, 12, 17, and 22 on the left side.

Second, the plainchant itself is left intact, so that one hears effectively two rhythmic layers moving concurrently: one broken, the other unbroken, one moving restlessly, the other tempering the impression of restlessness. Not only is the musical effect absolutely marvellous, as is always true of slow-moving tenors, but the plainchant provides an audible yardstick for listeners to appreciate to just what extent the other voices have been broken up.

Third, the music is no longer in score: score notation is suitable for unmeasured counterpoint – it was indeed the standard way of notating simple polyphony – but once counterpoint has been broken up, the parts must be written out separately.

Fourth, the more you break up the original note-against-note counterpoint, the slower it will have to be sung in performance. Ultimately the plainchant ends up moving at glacial pace, in a three-voice setting that takes up almost two minutes in performance. That is a long time just to sing the words ‘Pleni sunt celi et terra gloria tua.’ In the original plainchant (Example 1a), that could scarcely have taken more than about 20 seconds. So *cantus fractus* is not only highly florid, but the text setting is by definition highly melismatic – two qualities traditionally associated with the polyphony of the Eton Choirbook.

Fifth, and last, at bottom the task of the florid counterpoint is to fill in and sustain the original sonorities of the unbroken setting, which are effectively being stretched out to more than four times their original duration. As a consequence, the melodic shapes of the counterpoints show little or no apparent concern with phrasing or periodicity, but on the contrary are long, meandering, and completely irregular. In Continental music, this is the sort of style we associate with Manfred Bukofzer’s famous description of Ockeghem’s *Missa Caput*.¹³

The Scottish Anonymous discusses countering as a kind of music that can be sung on the spot as well as conceived in advance, improvised as well as composed. He provides some clues that make the idea of improvisation credible. In the case of the ‘Pleni sunt’, for example, the bass produces counterpoint by rigidly singing unison, third, fifth, unison, third, fifth, or their octave equivalents, against the tenor.¹⁴ If the singer of the top voice knows that the bass is repeating this 1–3–5 pattern, it is easy for him to avoid clashes, for his own options are limited to a set of predictable choices. Setting aside the sixth and octave (which the top voice can sing against the tenor at any time, provided he avoids octave parallels), his own pattern to observe is 3/5–3/4–4, that is, third or fifth, third or fourth, fourth, and so on

Also, we can tell from a further example in the Scottish Anonymous, a *Deus creator* with the plainchant in the top voice (Example 4), that countering was quite formulaic – exactly as one would expect in an oral tradition. In this *Deus creator*, the top voice begins each bar with the original plainchant note, and then breaks it in one of several stereotypical ways (itemized in Example 5), some of which can be heard again and again. In the end, it seems, the whole process may become a matter almost of threading together musical clichés.

If one had shown me this *Deus creator* setting without saying where it came from, or when it was written, my guess would have been that it was Continental, and dated from the 1470s or thereabouts – not from a treatise written a century later. It is of course

13. Manfred Bukofzer, ‘*Caput: A Liturgico-Musical Study*’, in *Studies in Medieval and Renaissance Music* (New York, 1950), pp. 217–310, esp. pp. 278–92.

14. As explained by Scottish Anonymous under the ninth rule of countering; cf. Maynard, “Heir Beginniss Countering”, pp. 187–8.

Example 4. *Deus creator omnium*, four-part 'contracenture' based on plainchant Kyrie trope in top voice (Scottish Anonymous).

After J. D. Maynard, 'An Anonymous Scottish Treatise on Music from the Sixteenth Century, British Museum, Additional Manuscript 4911: Edition and Commentary', 2 vols (Ph.D. dissertation, Indiana University, 1961), II, pp. 258-81.

The musical score is presented in four systems, each with four staves (Soprano, Alto, Tenor, Bass). The key signature is one flat (B-flat) and the time signature is 3/2. The lyrics are: "De - - - - us cre - - a - tor o - - - - -". The score includes asterisks above the top staff in measures 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79, 81, 83, 85, 87, 89, 91, 93, 95, 97, 99, 101, 103, 105, 107, 109, 111, 113, 115, 117, 119, 121, 123, 125, 127, 129, 131, 133, 135, 137, 139, 141, 143, 145, 147, 149, 151, 153, 155, 157, 159, 161, 163, 165, 167, 169, 171, 173, 175, 177, 179, 181, 183, 185, 187, 189, 191, 193, 195, 197, 199, 201, 203, 205, 207, 209, 211, 213, 215, 217, 219, 221, 223, 225, 227, 229, 231, 233, 235, 237, 239, 241, 243, 245, 247, 249, 251, 253, 255, 257, 259, 261, 263, 265, 267, 269, 271, 273, 275, 277, 279, 281, 283, 285, 287, 289, 291, 293, 295, 297, 299, 301, 303, 305, 307, 309, 311, 313, 315, 317, 319, 321, 323, 325, 327, 329, 331, 333, 335, 337, 339, 341, 343, 345, 347, 349, 351, 353, 355, 357, 359, 361, 363, 365, 367, 369, 371, 373, 375, 377, 379, 381, 383, 385, 387, 389, 391, 393, 395, 397, 399, 401, 403, 405, 407, 409, 411, 413, 415, 417, 419, 421, 423, 425, 427, 429, 431, 433, 435, 437, 439, 441, 443, 445, 447, 449, 451, 453, 455, 457, 459, 461, 463, 465, 467, 469, 471, 473, 475, 477, 479, 481, 483, 485, 487, 489, 491, 493, 495, 497, 499, 501, 503, 505, 507, 509, 511, 513, 515, 517, 519, 521, 523, 525, 527, 529, 531, 533, 535, 537, 539, 541, 543, 545, 547, 549, 551, 553, 555, 557, 559, 561, 563, 565, 567, 569, 571, 573, 575, 577, 579, 581, 583, 585, 587, 589, 591, 593, 595, 597, 599, 601, 603, 605, 607, 609, 611, 613, 615, 617, 619, 621, 623, 625, 627, 629, 631, 633, 635, 637, 639, 641, 643, 645, 647, 649, 651, 653, 655, 657, 659, 661, 663, 665, 667, 669, 671, 673, 675, 677, 679, 681, 683, 685, 687, 689, 691, 693, 695, 697, 699, 701, 703, 705, 707, 709, 711, 713, 715, 717, 719, 721, 723, 725, 727, 729, 731, 733, 735, 737, 739, 741, 743, 745, 747, 749, 751, 753, 755, 757, 759, 761, 763, 765, 767, 769, 771, 773, 775, 777, 779, 781, 783, 785, 787, 789, 791, 793, 795, 797, 799, 801, 803, 805, 807, 809, 811, 813, 815, 817, 819, 821, 823, 825, 827, 829, 831, 833, 835, 837, 839, 841, 843, 845, 847, 849, 851, 853, 855, 857, 859, 861, 863, 865, 867, 869, 871, 873, 875, 877, 879, 881, 883, 885, 887, 889, 891, 893, 895, 897, 899, 901, 903, 905, 907, 909, 911. The lyrics "De - - - - us cre - - a - tor o - - - - -" are placed below the first system. The lyrics "mni - um." are placed below the fourth system.

Example 5. Recurring ‘ornamental’ formulas in the top voice of *Deus creator omnium* (Example 4), transposed so as to illustrate different ways of breaking the note G.

The image shows a musical score for Example 5, consisting of seven staves of music in G minor. The top staff begins with a whole note G. The subsequent six staves show various rhythmic and melodic patterns that break the note G, illustrating different ways of ornamentation. The patterns include eighth notes, quarter notes, and sixteenth notes, often with rests or other notes, demonstrating how the note G is broken into smaller rhythmic units.

entirely possible that the Scottish Anonymous copied his example from a much older source. On the other hand, it is worth emphasizing that the practice of countering ensures a certain degree of stylistic continuity, if only because it closes off a range of alternative compositional choices. Ultimately, I think, that is what Tinctoris complained about in the English *stilus componendi* – that it always came down to one and the same thing.

However that may be, it is worth noting that *cantus fractus* is more than just a practice, a way of doing things: it also helps one to understand and appreciate the end result, and thereby encourages a particular way of listening. Just by calling it *cantus fractus*, one already affirms that the sounding end result, no matter how complex and involved, must be a reworking of what was originally simple counterpoint notated in score. In the case of the *Deus creator* in Example 4, the Scottish Anonymous does not give us the original, but one can make a reasonable guess as to what it sounded like, if only by reversing the process and systematically ‘un-breaking’ the florid counterpoint. This awareness, that there is always a simple note-against-note basis underlying *cantus fractus*, must have been encouraged also by the circulation of pieces in more or less elaborately ornamented form.

A well-known example is the *Salve regina* by John Dunstable or Leonel Power, shown in Example 6.¹⁵ We know of two versions, shown here on top of one another as Examples 6a and 6b. Example 6a, in the Ritson manuscript, is written there in stroke notation, and hence it moves only in the two note-values that can

15. Hugh Benham, “‘Salve Regina’ (Power or Dunstable): A Simplified Version”, *Music & Letters*, 59 (1978), pp. 28–32.

Example 6. John Dunstable or Leonel Power, *Salve regina*, bars 1–24: comparison between versions in (a) the Ritson Manuscript LonBL Add. 5665 and (b) Italian sources (ModB, AostaS D19, TrentC 90 and TrentC 92).

After E. Lane, N. Sandon, and C. Bayliss, eds, *The Ritson Manuscript* (Antico Edition RCM23; Moretonhampstead, 2001), p. 125, and John Dunstable, *Complete Works*, ed. Manfred Bukofzer et al. (Musica Britannica, 8; London, 1970), p. 152.

The image displays two systems of musical notation for the piano accompaniment of 'Salve regina'. Each system consists of two staves: a right-hand staff (treble clef) and a left-hand staff (bass clef). The music is in 3/4 time and G minor. The first system covers bars 1 through 6. The second system, starting at bar 7, covers bars 7 through 12. The third system, starting at bar 13, covers bars 13 through 18. The notation includes various rhythmic values such as minims, crotchets, and quavers, along with rests and phrasing slurs. The left-hand part provides harmonic support with chords and moving bass lines, while the right-hand part features a more melodic line with some syncopation.

19

Musical score for measures 19-25. The score is in 2/4 time and B-flat major. It consists of two systems of grand staff notation. The first system (measures 19-21) features a vocal line with a melodic line and a piano accompaniment with chords and moving bass lines. The second system (measures 22-25) continues the vocal and piano parts, with the piano accompaniment showing more complex chordal textures and melodic movement in the bass.

26

Musical score for measures 26-32. The score is in 2/4 time and B-flat major. It consists of two systems of grand staff notation. The first system (measures 26-28) shows the vocal line with a melodic line and a piano accompaniment with chords and moving bass lines. The second system (measures 29-32) continues the vocal and piano parts, with the piano accompaniment showing more complex chordal textures and melodic movement in the bass.

33

Musical score for measures 33-39. The score is in 2/4 time and B-flat major. It consists of two systems of grand staff notation. The first system (measures 33-35) shows the vocal line with a melodic line and a piano accompaniment with chords and moving bass lines. The second system (measures 36-39) continues the vocal and piano parts, with the piano accompaniment showing more complex chordal textures and melodic movement in the bass.

40

Musical score for measures 40-46. The score is in 2/4 time and B-flat major. It consists of two systems of grand staff notation. The first system (measures 40-42) shows the vocal line with a melodic line and a piano accompaniment with chords and moving bass lines. The second system (measures 43-46) continues the vocal and piano parts, with the piano accompaniment showing more complex chordal textures and melodic movement in the bass.

47

53

be accommodated by this way of writing. Hugh Benham may well have been right to suggest that the Ritson version was a simplification of the version shown in Example 6b. Then again, I do not think it would have been so easy to simplify Example 6b unless it, in turn, had originated in a simple version to begin with. Of course, there are innumerable ways in which singers could elaborate or simplify a setting that had come down to them in any particular form. Example 7 shows common source variants between manuscripts collected by Howard Mayer Brown – alternative versions of what are essentially the same melodic turns. Such variants do not affect the integrity of the musical work, but merely serve to adapt it to different performance contexts, depending on whatever decorum required in each case. Depending on the liturgical occasion – whether, for example, it was a festive tribute to the Queen of Heaven, or a humble prayer to the Grieving Mother in times of trouble and despair – singers could modify the stylistic register of a given piece as needed.

Example 7. Typical variant readings between fifteenth-century chansonniers, after H. M. Brown, 'Improvised Ornamentation in the Fifteenth-Century Chanson', *Quadrivium*, 12 (1971), pp. 238–58, at p. 245.

The image displays ten staves of musical notation, each representing a different variant reading of a piece of music. The notation is written in a single system on a five-line staff with a treble clef. The music consists of a sequence of notes and rests, with various rhythmic values and melodic contours. The staves are connected by double bar lines, indicating the end of a phrase or a measure. The notation is presented in a clear, black-and-white format, typical of a music score.

Example 8a. Richard Davy, *O Domine caeli terraeque creator*, bars 1–9. After F. Ll. Harrison, *The Eton Choirbook*, 3 vols, Musica Britannica, 10–12 (London, 1973), II, p. 62.

Example 8a shows the vocal entries for the first nine bars of 'O Domine caeli terraeque creator'. The Soprano part starts with a bracketed section containing a whole note 'O'. The Medius, Countertenor, Tenor, and Bassus parts have various rhythmic patterns and rests.

Example 8a continues with bars 5-9, showing the vocal parts continuing their lines with various rhythmic patterns and rests.

Example 8b. Richard Davy, *O Domine caeli terraeque creator*, bars 1–9 ‘unbroken’.

Example 8b shows the 'unbroken' version of bars 1-9, featuring a single staff with a complex, unbroken melodic line in the treble clef and a corresponding line in the bass clef.

Example 8c. Further ‘unbreaking’ of Example 8a.

Example 8c shows further 'unbreaking' of Example 8a, featuring a single staff with a complex, unbroken melodic line in the treble clef and a corresponding line in the bass clef.

From all this, it stands to reason that composers would have worked in two stages: first, they would set up the basic scaffolding by writing note-against-note counterpoint in score – which is what Richard Davy could have done in the first half hour or so – and then spending the rest of the day breaking up the notes. The latter was probably the really time-consuming part, for it is here that the true master left the amateur behind. Consider the opening bars of Richard Davy's motet, shown in Example 8a. In this case it is not hard to discern a simpler version beneath the florid exterior: Example 8b shows an unbroken version of the same opening. This is not quite note-against-note counterpoint, of course: there are still four contrapuntal notes against one plainchant note. There may have been a very early sketch in whole notes like Example 8c, but actually I am inclined to doubt that. While it might be anachronistic to view Example 8b as a kind of Schenkerian middle ground, it does seem to have a similar significance. For it is on this level that the really important large-scale decisions are made.

My son Thomas, who is ten years old, has a passionate interest in all things prehistoric, and recently he and I were watching a DVD about stone-age tools. I was intrigued to learn that there are French scholars who have perfected the art of making flint arrowheads, and have discovered vital clues about stone-age technology in the process. This inspired me to put my own lessons in countering in practice, and to find out how to make one's own *cantus fractus*. Example 9a gives the sounding end result, a five-part piece in florid counterpoint, based on *God Save the Queen*.

It was surprisingly easy to make this: Example 9c shows the first stage, in note-against-note counterpoint. At this point I was not going to bother with simultaneous conception: I simply added one part after the other, from the bass up. Nor was I particularly concerned about parallel fifths or octaves, since they would inevitably disappear once I started breaking up the notes. This stage took five minutes at most, and in the next twenty minutes I broke it down to the intermediate stage shown in Example 9b. I found that four notes against one does indeed work best, because there is still plenty of scope for further breaking, but the broad canvas of the piece is nevertheless set up.

By far the most time-consuming was the final stage, resulting in Example 9a, largely because at this level, the important decisions are not about contrapuntal correctness – the difficult thing about parallel fifths and octaves is not how to avoid them, but when to permit them. Rather, everything revolves around the question what sounds idiomatic and what does not – and this is a matter of intuition more than anything else. I set out to write as florid a piece as I could, but it is clear that I've worked on Continental music for too long to write anything sounding like genuine Eton. Be that as it may, if this example took me about two-and-a-half hours, I can well imagine that a master like Richard Davy could compose a whole motet in a day.

Example 9a. Hodander, *Reginam salvet Deus.*

Musical score for Example 9a, measures 1-6. The score is in 4/4 time and B-flat major. It consists of five staves: four vocal staves (Soprano, Alto, Tenor, Bass) and one piano accompaniment staff. The lyrics 'Re' are written under the Soprano staff in measure 6.

Musical score for Example 9a, measures 7-11. The score continues with the same five-staff format. The lyrics '- gi - - - - - nam - - - - - sal - - - - -' are written under the Soprano staff across measures 7-11.

Musical score for Example 9a, measures 12-15. The score continues with the same five-staff format. The lyrics '- - - - - vet De - - - - - us.' are written under the Soprano staff across measures 12-15.

Example 9b: *Reginam salvet Deus*, simple counterpoint, broken (intermediate stage between Examples 9a and 9c).

1

2

3

4

5

Re - - gi - - nam sal - - - vet De - - us.

Example 9c. Simple note-against-note counterpoint on *Reginam salvet Deus*.

1

2

3

4

5

Re - gi - nam sal - vet De - us.

For most of the fifteenth century, at least up to about the 1480s, I assume that Continental composers worked in exactly this way. The Eton style may sound distinctive and novel for the end of the fifteenth century, but I have also emphasized the stylistic continuity inherent in *cantus fractus*. One should not be surprised to discover close stylistic approximations to Eton dating as far back as the mid-fifteenth century, or even further. This would explain, for example, the inclusion of a motet by Dunstable in the Eton Choirbook. It is likely that some Continental composers also persisted in *cantus fractus* until 1500 and beyond: Alexander Agricola, in his sacred music, is a good example.¹⁶ Agricola's problem, to my mind, is that he does not know when to stop breaking, and to leave well-enough alone. But by the end of the fifteenth century, most Continental composers seem to have thought of *cantus fractus* as something old-fashioned, compared to the new art of musical composition.

To illustrate how Continental *cantus compositus* is different from English *cantus fractus*, I need to name only one piece: Josquin's *Ave Maria*. This setting is the very antithesis of *cantus fractus*: its motives and phrases do not take shape within a framework outlined by the whole notes of simple counterpoint, on the contrary: it is the counterpoint that gradually takes shape from the basic material provided by the motives. The way of thinking is almost exactly the opposite.

What Josquin did, in *Ave Maria*, was push to its logical conclusion a tendency already latent in Continental composition. *Cantus fractus* does not encourage imitation but, if you have a particular taste for it, you can always break in such a way as to create the appearance of motives travelling from one voice to another – if only by some primitive device like *Stimmtausch*. By definition, however, those motives would have had to be triadic in outline, since they had to fill out the sonorities provided by the overarching contrapuntal framework. Example 10, a five-part *Deo gratias* included in the *Liber de arte contrapuncti* of Johannes Tinctoris, shows how it could be done. To my eye and ear, this brief but elegant setting looks and sounds like *cantus fractus*. In fact it would not be difficult to reduce it to a more basic contrapuntal conception. Yet Tinctoris also tries hard to make it *not* look and sound like *cantus fractus*. He does so mainly by introducing imitations at various points. The effect of this is to change the very fabric of the counterpoint. In *cantus fractus*, voices typically stay close to the note that is being broken up, and even if they move far away, they will just as quickly come back to that note. That is why it is usually not hard to guess which was the original note. But triadic motives need not come back at all; in fact, imitations are more effective when they do not. One could almost say that such motives *need* to be open-ended, so that each iteration can build on the momentum generated by the previous one.

Consider measure 5 in the Tinctoris example: the motive here could scarcely be simpler, and yet, could one construe it as a broken version of either the pitch C or the pitch G? No, one cannot. For one thing, no matter whether we picked C or G, we would end up

16. As shown convincingly by D. Kämper, 'Instrumentale Stilelemente bei Alexander Agricola', *TVNM*, 28 (1978), pp. 1–13.

Example 10. *Deo gratias*, five-part music example in Tinctoris, *Liber de arte contrapuncti* (1477), II.xx, illustrating counterpoint fashioned *scripto* (as opposed to *mente*). After J. Tinctoris, *Opera theoretica*, ed. A. Seay, 2 vols (Corpus Scriptorum de Musica, 22; n.p., 1975–78), II, pp. 107–10.

The image displays a musical score for a five-part setting of "Deo gratias" in 3/2 time. The score is organized into four systems, each beginning with a measure number (1, 6, 11, and 16). The voices are labeled on the left as Contratenor tertius, Tenor, Contratenor secundus, and Contratenor primus. The lyrics "De o gra ti as." are written below the staves, with some syllables appearing in multiple staves. The music features complex counterpoint with various rhythmic patterns and melodic lines. The key signature has one flat (B-flat), and the time signature is 3/2. The score includes various musical notations such as clefs, notes, rests, and bar lines.

viewing the whole bar as consisting basically of the same note in all four voices – a bare double octave, which in counterpoint is a sound worse than dissonance. More importantly, the compositional substance *itself* now seems to be made up by imitation. At this particular point, the music is not about sustaining a sonority originally conceived in simple counterpoint, but about a motivic process whose effectiveness does not depend on sonority at all. One is meant to hear this bar, not as simple counterpoint broken up, but as a threading together of discrete but open-ended motives. One stylistic device, imitation, has assumed such musical prominence here as to break down the very parameters of *cantus fractus*.

What I have sketched in this paper, in its basic outlines, is the musical counterpart to a series of major changes in musical culture that took place in Continental Europe in the later fifteenth century – changes I have analysed at some length in my recent monograph *The Crisis of Music in Early Modern Europe*. That monograph was based almost wholly on documentary evidence, and ironically it involved not a single musical example. But documentary evidence suggests, as I argued there, that the English *stilus componendi* of which Tinctoris complained in the early 1470s was in fact *cantus fractus*.¹⁷ In the present contribution I hope to have demonstrated how that hypothesis could make sense in concretely musical terms, and I hope to return to that issue in the future.

17. Wegman, *The Crisis of Music*, pp. 160–1.

