

The Technique of Chromatic Completion in Haydn's Late Masses

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It has been a joy for me in recent years, in various publications and at several scholarly gatherings, to illustrate the surprising fact that the late vocal music of Haydn frequently displays the phenomenon of chromatic completion. By which I mean: again and again in these compositions there are structural units—cycles of musical time—defined within by the gradual unfolding of all twelve members of the chromatic aggregate. What is remarkable is that the twelfth and ‘completing’ tone arrives in a manner that has clear structural and expressive significance. So much so that one is led to the conclusion that these “cycles of chromatic completion” are hardly accidental; in fact that they were central to the composer’s artistic designs.

Though the phenomenon of chromatic completion is present in Haydn’s late vocal writing in all genres from catch to grand oratorio, a point I illustrate in “Haydn’s Secret ‘Dodecaphonic’ Art” published in the *Journal of Music and Meaning* (Winter 2009; www.musicandmeaning.net), this essay addresses only the late Masses, including the 1782 *Missa Cellensis*. I give samples only, but suggest that illustrating the full range of how Haydn employed the technique in these seven major compositions would easily take a book.

Years ago, when I first began to suspect that chromatic completion was present in this music, I was startled by the implications. The systematic use of the chromatic aggregate is, after all, a musical procedure associated with the twentieth century and the atonal serialism of the Second Viennese School, and here perhaps was something clearly

related to it more than a century earlier at work in the largely diatonic classicism of the First Viennese School! Of course, there are obvious differences. First, Haydn is working against a diatonic background, a fact that makes the arrival of the twelfth and “completing” tone something quite audible. Second, no serialization is required, nor is there prohibition against repetition of tones between entries of new pitch-classes.

Perhaps at this point, early in the essay, I should mention that in my own creative work I am not particularly inclined towards a high degree of chromaticism, nor in my teaching of young composers am I an advocate of twelve-tone row structures. So as far as I can determine, I met this technical phenomenon in Haydn’s music with no subconscious agenda inclining me to imagine “dodecaphonic” structures where they were not; I had no private stake in finding reason to defend a contemporary compositional procedure by giving it a long and distinguished historical pedigree. Instead, this was a case of a reluctant scholar being led by the sheer accumulation of the evidence to a conclusion so strange to him at first, even scandalous, that it was resisted strongly. Yet, as has been said, “facts are stubborn things,” and my on-going research did reveal that Haydn was apparently so enamored of the technique that more often than not it is present in his late music, whether vocal or instrumental.

A word about the technical examples. What you will not encounter here is too deep a delving into the question of historical context, nor into issues of how to coordinate our understanding of this compositional phenomenon to traditional ways of apprehending structure in the music of the late Classical Era, nor even into the truly engaging problem of the degree to which we might soberly attribute conscious intent to Haydn as he employed this mode of tonal organization. Such in-depth explorations I

have done elsewhere (most exhaustively in my doctoral thesis¹), and I trust that readers who wish to investigate these questions more fully will turn to these other writings. In the present article I will simply proceed on the belief that Haydn was aware of what he was doing, which I see as amply justified. And if the samples I present afford sufficient evidence that “where there’s smoke, there’s fire,” that is, give evidence enough for readers to wish to explore the issue further, I will count this essay a success.

1. Some Introductory Examples

Let us commence with two swift instances of chromatic completion taken from the *Harmoniemesse* of 1802.² The first is from the very beginning of the Mass. [Example 1] It opens with a sixteen-bar passage for the orchestra. Along with the notes of the diatonic scale in B-flat major, four chromatic tones are heard in this instrumental prelude: G-flat enters in bar 5, E natural in bar 10, and both A-flat and C-flat in bar 12. Only D-flat is missing. When does it appear? Precisely as the chorus makes its first entrance.

Example 1: *Harmoniemesse, Kyrie*, mm.1-12

Poco adagio $\text{♩} = 50$

Orch.

5

9

13

17

S
A

T
B

17

ff *fz*

Ky - ri - e e - lei - son.

Ky - ri - e e - lei - son.

The next example comes from later in the movement. [Example 2]

Example 2: *Harmoniemesse*, Kyrie, mm.62-67

The image displays a musical score for Example 2, consisting of two systems of music. The first system covers measures 62-64, and the second system covers measures 65-67. The score is written for four vocal parts (Soprano, Alto, Tenor, Bass) and an Orchestra (Orch.). The key signature is B-flat major (two flats), and the time signature is 3/4. The lyrics for all parts are: "Chri - ste e - lei - son, e - lei - son." The vocal parts feature melodic lines with some chromaticism, particularly in the Soprano and Alto parts. The orchestration includes piano accompaniment with chords and moving lines in both hands.

If the first example illustrated the use of chromatic completion to highlight a dramatic change in musical timbre, texture, and dynamic, this second instance employs

it to underscore a verbal issue: the fact that a grammatical (and also theological) unit has been fully expressed. From bars 62 through 67 Haydn sets the words “Christe eleison,” and though the passage is short, all twelve tones appear.³ This procedure is not limited to this passage in the *Harmoniemesse*. In many of his late Masses Haydn sets the words “Christe eleison” in a similar manner. For example, in the *Theresienmesse* (1799), the Christe is fourteen measures long (bars 52-65), and the aggregate is completed in bar 63.⁴

One is led to speculate: was this a way Haydn, perhaps, meant to symbolize the idea of Christ as “Alpha and Omega,” of Christ as redeeming wholeness, the answer to our incompleteness? (But I am leaping ahead!) Quite independent of the possible symbolic value of the technique of chromatic completion is the more elemental question of whether it exists at all. Is it real, or simply an auditory chimera? Is it organically, authentically present, or merely a by-product of other, more customary compositional procedures?

The last of my introductory examples should go a long way towards answering these questions. It is from the *Theresienmesse* of 1799, and illustrates an important fact: while chromatic completion follows a strict principle, it is nevertheless wonderfully flexible. It was employed by Haydn with great imagination and, as a result, unique musical forms often emerged.

Consider the Kyrie. It is in B-flat major, and consists of a fugal Allegro flanked by two largely homophonic Adagios. The first Adagio makes use of every member of the chromatic aggregate except A-flat and B natural. The following Allegro contains several unfoldings of the aggregate which I will not enumerate here (see Chapter 4 of my

thesis). The salient point concerns the two Adagios. The second Adagio recapitulates the first, yet uses *only* the chromatic tones *absent* in its earlier counterpart: A-flat (bar 98) and B natural (bar 100). Moreover, there is no use whatsoever of the D-flat, E natural, and G-flat which were introduced in the first Adagio. Although separated over time by the Allegro passage, it is as if Haydn intended the two Adagio sections to be heard as one large unit, conjointly expressing the entire chromatic aggregate.

2. Chromatic Symbolism

As I suggested earlier, there is strong evidence that Haydn used chromatic completion for symbolic purposes: to highlight the grammatical, emotional, even philosophic meaning of the text he was setting by way of technical parallels in its musical structure which are related to how the twelve chromatic tones unfold. Two more examples from his Masses will further illustrate how this may be true.

The first is from the *Missa Cellensis*: that portion of the Credo in which the composer sets the words “Crucifixus etiam pro nobis, sub Pontio Pilato passus et sepultus est.” [Example 3] These words from the Nicene Creed of the fourth century, and perhaps date back even further, have been heard in one language or another in church services for close to two millennia. They express the agony and terror of death, a terror that is two-fold and in a sense contradictory: death is utter in its finality and therefore in its completeness, yet it is equally terrifying in its emptiness, its sense of absence, its incompleteness.

Example 3: *Missa Cellensis*, Credo, mm.1-20

The musical score is written in 4/4 time with a key signature of two flats (B-flat and E-flat). It features four vocal staves (Soprano, Alto, Tenor, Bass) and an orchestral part. The lyrics are: Cru - ci - fi - xus e - ti-am pro no - bis, sub Pon - ti - o Pi - la - to pas - sus et se - pul - tus, se - cru - ci - fi - xus e - ta-am pro no - bis, sub Pon - ti - o Pi - la - to. The orchestral part includes a piano (p) and forte (f) dynamic marking.

7

no - bis, sub Pon - ti - o Pi - la - to pas - sus, pas - sus et se -
 Cru - ci - fi - xus e - ti - am pro no - bis, sub Pon - ti - o Pi - la - to
 pul - tus est. Cru ci fi - xus e - ti - am pro no - bis, sub
 pas - sus et se - pul - tus est. Cru - ci - fi - xus

10

pul - tus est, pas - sus, pas - sus et se - pul - tus, se -
 pas - sus et se - pul - tus est, pas - sus, pas - sus et se - pul - tus, se -
 Pon - ti - o Pi - la - to pas - sus, pas - sus et se - pul - tus, se -
 e - ti - am pro no - bis, pas - - - sus et se -

13

pul - tus est, pas - sus et se - pul - tus est, et se -
 pul - tus est, pas - sus et se - pul - tus est, et se -
 pul - tus est, pas - sus et se - pul - tus est, et se -
 pul - tus est, et se - pul - tus, se - pul - tus est, et se -

Vivace

16

pul - tus est. Et re - sur - re - xit
 pul - tus est. Et in Spi - ri - tum San - ctum, Do - mi - num
 pul - tus est. Et i - te - rum ven - tu - rus est
 pul - tus est. Qui cum Pa - tre et Fi - li - o

Like every other human being who has ever lived, Haydn, I believe, was trying to see life and death as making some acceptable, coherent sense. How well he succeeded, simply as a person among other persons in late eighteenth-century Austria, is beyond the scope of this particular study and would require a depth of biographic research I have not undertaken. But that Haydn succeeded as an *artist* in making these (and other) difficult opposites one can be demonstrated technically. At the end of this essay I shall briefly explore the significance of this by means of the philosophy of Aesthetic Realism, founded by the great American poet and critic Eli Siegel. Its core concept is his statement: “The resolution of conflict in self is like the making one of opposites in art.”⁵ In this passage from the Credo of the *Missa Cellensis*, the composer at first emphasizes the “fullness” of death: its overwhelming reality, its almost unbearable pain. To do this, he set the text concerning the crucifixion in a densely chromatic manner. The aggregate is completed very swiftly; in fact, it reaches its fulfillment more than once: the first cycle takes just under four bars to find its final constituent, the second, just over two.⁶

Given the pace of this pair of unfoldings, a listener might easily expect (subconsciously, at least) that another swift and complete chromatic saturation of musical space would ensue, and it almost happens. Within three bars, eleven of the twelve tones appear. All that is missing for a third full unfolding of the chromatic aggregate is an E natural.⁷ Yet we must wait for it! Seven more highly chromatic bars, and still there is no E natural. The music cadences and seems to come to a complete halt just as Christ’s life appears to have reached its end. In a near whisper the choir gives a final iteration of “sepultus est.” There is a sense of great emptiness, of great and enveloping darkness. Then, seemingly without any preparation, the music bursts forth—

forte and Vivace; and there, in the brightness of the new key of C major, is the missing E natural, and the words “Et resurrexit.”⁸

With masterful art, Haydn has made us long for the very tone that defines this new key. Was the art fully conscious? It is hard to say, for this Mass, composed in 1782, lies chronologically at a dividing point for Haydn. As the score to *Orlando Paladino*, also composed in 1782, indicates, apparently Haydn at this time was beginning to think (perhaps instinctively at first) along the lines of aggregate completion as a structural and expressive force.⁹ However he achieved it, the effect of that moment in the *Missa Cellensis* is unarguably powerful. The intense contrast between minor and major, between whisper and shout, between a near stasis and a sudden access of energy, makes one feel with almost physical immediacy the joyous release expressed in this sacred text.

Here in the midst of the resurrection, the utter antithesis of death and in a theological sense its completion,¹⁰ the aesthetic question facing any composer of sacred music is how to convey that theological meaning through the symbolism of organized sound. Haydn used the power of chromatic completion to create just such symbolism: a convincing link between otherwise separate pieces of music, and hence between contrary worlds of feeling. We are led to feel that death is *not* the last word, but that life *must* emerge from it—joy from anguish. It is a message at once specific to the Christian faith, which Haydn held firmly, and also universal in its import, because everywhere in the world humanity has hoped to give form to the relation of these intense and inevitable opposites, joining them in a manner at once sensible and satisfying.

Haydn treats the next juxtaposition of death and life in the sacred text in a similarly ecstatic manner. The ensuing Vivace is forty-four bars long. While it maintains

that swift and cheerful tempo throughout, its tonality hardly remains bright. It darkens soon to D minor,¹¹ and by bar 37 it has settled into C minor. And here, with the arrival of E-flat, the ‘depressive’ minor third,¹² the aggregate once more is made complete.¹³

At this point, even more of the boldness of Haydn’s art in terms of chromatic completion is apparent, for what the chorus is singing, “Et expecto resurrectionem mortuorum,” are words which, read in the most obvious manner, would incline one towards cheerfulness. By giving these words such dark music, he insists on the mortuary aspect of the liturgical phrase. Once again, he demands that his listeners contemplate the terror of death. We again look upon the skull; death seems to be reality’s final word. Or is it? For now enters a new *Vivace*, and with it the reaffirmation of C major. The words (set fugally) are “et vitam venturi seculi.” As if he cannot say it often enough, Haydn conveys through the symbolic power of musical sound that life is not to be denied.¹⁴

3. Continuing with the Paukenmesse

Though Haydn’s cheerfulness was proverbial (as Peter Kivy, among many others, has noted, “when asked why his church music was often so light-hearted, [Haydn] is supposed to have replied: ‘Because whenever I think of my God I laugh with joy.’”¹⁵), the composer’s good nature was not achieved through a refusal to recognize, or linger thoughtfully with, the reality of painful things. As his *Missa Cellensis* setting indicates, Haydn’s cheerfulness was neither superficial nor cowardly. If he had good nature (and he did), it was hard-earned, and it was with eyes wide-open.

As evidence, consider the *Paukenmesse*, more properly known as *Missa in Tempore Belli*. In it Haydn employs a procedure that is precisely the reverse of what we just observed in the *Missa Cellensis*. Fourteen years separate the Masses; and what years! By 1796 Europe was deeply in the midst of bloodshed. Darkness and pain seemed triumphant, and Haydn was not afraid to give weight to these painful realities. This is another Mass in C major, the most optimistic of keys, yet in every movement the dark minor third E-flat is the goal of the first unfolding of the chromatic aggregates. It is as if, in keeping with the death and destruction of the day, all that had once seemed bright had spiraled into anguish.

The Kyrie opens with a ten-measure Largo, darkening as it goes and concluding with the arrival of E-flat (bar 8).¹⁶ [Example 4] The first cycle of the Gloria likewise has E-flat, spelled enharmonically as D-sharp, as its point of completion.¹⁷ The Credo's opening section (a thirty-three measure Allegro) makes use of eleven notes of the aggregate. Missing is E-flat, which finally appears in the very first bar of the "Et Incarnatus" which follows, establishing the new, minor modality.¹⁸

Example 4: *Paukenmesse*, Kyrie, mm.1-10

Largo

p *f*

S Ky - ri - e e - lei - son, Ky - ri - e e - lei - son, Ky - ri - e e - lei - son, Ky - ri - e.

A Ky - ri - e e - lei - son, Ky - ri - e e - lei - son, Ky - ri - e e - lei - son, Ky - ri - e.

T Ky - ri - e e - lei - son, Ky - ri - e e - lei - son, Ky - ri - e e - lei - son, Ky - ri - e.

B Ky - ri - e e - lei - son, Ky - ri - e e - lei - son, Ky - ri - e e - lei - son.

Largo

p *f*

Orch.

6 *pp* *f*

Ky - ri - e e - lei - son, e - lei - son, e - lei - son, e - lei - son, e - lei - son, e - lei - son.

pp *f*

Ky - ri - e e - lei - son, e - lei - son, e - lei - son, e - lei - son.

pp *f*

e - lei - son, e - lei - son, e - lei - son, e - lei - son.

pp *f*

Ky - ri - e e - lei - son, e - lei - son, e - lei - son, e - lei - son, e - lei - son, e - lei - son.

The Sanctus resembles the Credo by likewise making use of chromatic completion to link its opening two sections. But where the Credo went from fast to slow, here there is a beginning Adagio which, with the arrival of the words “Pleni sunt coeli et terra,” turns into an Allegro con spirito. Precisely on the first choral exclamation of the word “pleni,” the aggregate is completed, again with the arrival of the minor third.¹⁹ Perhaps the philosophic irony was intentional: pain (the minor third) being needed for reality to be “complete.” If so, it is further evidence for the profundity and courage of Haydn’s good cheer.

The Agnus Dei is set in the key of F major rather than C Major, and therefore falls outside of the pattern.²⁰ Yet the “Dona” which follows, and which concludes the Mass, returns to the tonic key of C, and once again Haydn reiterates his structural (and philosophic) motto, for the entire movement, grand as it is (stretching 125 bars), is but a single unfolding of the chromatic aggregate. As one might expect, E-flat is the last chromatic tone to appear, and it does so in a heart-rending manner. The text reads “dona nobis pacem,” and on “pacem,” with an intense diminished 7th chord just twelve measures from the end of the entire Mass, the aggregate reaches its fulfillment.²¹ From here on, not a single chromatic tone disturbs the diatonic peace. It is as if Haydn, in the midst of presenting what otherwise could easily seem music of simple, celebratory cheer, is insistent that we never forget the possible anguish, pain, and terror of the world. It is a world represented by the bright C major, but it includes *every* possibility, including the darkest and most agitating.

4. Further Examples from the Late Masses

In his late work, Haydn was often fond of equating a complete musical unit—a section marked off by a different tempo from those surrounding it—with a single unfolding of the aggregate. Often he did so by framing this chromatic unfolding with purely diatonic music. Such framing is, in fact, more often than not his procedure when employing the technique of chromatic completion. The canonic “Allegro con spirit” which opens the Credo to the 1798 *Missa in Angustiis*: the *Nelson Mass* illustrates each of these points. [Example 5] Once the twelfth tone, the C natural in bar 78, appears, the piece draws swiftly to its conclusion, and no further chromaticism is heard.²² Likewise, the first part of the “frame,” the opening twelve measures, are purely diatonic.

Example 5: *Paukenmesse*, Kyrie, mm. 1-10

68

S de - scen - dit de coe - lis,

A de coe - lis, de - scen - dit de

T de - scen - dit de coe - lis,

B de coe - lis, de - scen - dit de

Orch. *fz* *fz* *fz*

72

de - scen - dit de coe - - -

coe - lis, de - scen - dit de coe - - -

de - scen - dit de coe - - -

coe - lis, de - scen - dit de coe - - -

72 *fz* *fz*

76

lis, de - scen - dit de coe - lis, de
- - - - - lis, de - scen - dit de coe - lis, de
lis, de - scen - dit de coe - lis, de
- - - - - lis, de - scen - dit de coe - lis, de

76

80

coe - - - lis, de coe - - - lis.
coe - - - lis, de coe - - - lis.
coe - - - lis, de coe - - - lis.
coe - - - lis, de coe - - - lis.

80

Two other Esterházy Masses demonstrate how Haydn employed chromatic completion for structurally articulative purposes. The Kyrie in both the *Paukenmesse* and the *Schöpfungsmesse* begins with a relatively short slow section, contrasted by a longer, rapid one. Haydn employed chromatic completion to highlight the relation of these contrasting sections, yet each in a very different manner.

The *Paukenmesse* of 1796 is in C major. The opening Largo is ten bars long, and unfolds the aggregate once, with no extra chromatic tones at the end.²³ Adding a sense of unusual darkness of tonal coloration, all five chromatic tones are introduced as flats. An Allegro moderato immediately follows the half-cadence ending of the Largo. The contrast is striking. Not only is the major modality restored, the musical texture has become far more delicate. The dynamic is now *piano*, the orchestra is reduced simply to the strings, and the vocal music to a solo soprano. The separation of the two sections is further emphasized by the Largo plainly standing as a “self-contained” unit of chromatic unfolding.

If chromatic completion tends to separate these sections, there are also musical parameters that work to bind them together. The half-cadence is the most obvious, but hardly the only one. As H.C. Robbins Landon pointed out, there is also a strong motivic connection between the sections: “The choral entry [at the opening of the Largo] contains the essence of the *Urlinie* of the beautiful *cantabile* theme of the ensuing Allegro moderato.”²⁴

The *Schöpfungsmesse* of 1801, in B-flat major, likewise shows the interplay of separation and junction, the key phenomenological opposites behind any awareness of successful artistic articulation, musical or otherwise. But here, in contrast to the

Paukenmesse, chromatic completion serves the cause of junction. Its opening Adagio has two cycles of chromatic unfolding, one complete, the other incomplete. The first concludes precisely in time to mark the most dramatic moment in the Adagio: the unexpected modulation to G-flat major in bar 19.²⁵ [Example 6] Thus, something new (a fresh tonality) begins exactly as something old (the process of aggregate completion) reaches its fulfillment. There is also the simultaneous experience of surprise and logical preparation. Of course, this is not the only technique Haydn employs to achieve his end; chromatic completion is assisted by a common tone modulation.

Example 6: *Schöpfungsmesse*, Kyrie, mm.1-20

Orch.

p

4

fz *p* *fz* *p*

7

Alto Solo

Ky - ri - e,

10

Ky - ri - e - lei - son, e - lei - son

f

Tutti

13 *f*

S Ky - ri - e e - lei - son.

A *f* Ky - ri - e e - lei - son. **Solo** Ky - ri - e -

T *f* Ky - ri - e e - lei - son.

B *f* Ky - ri - e e - lei - son.

ff *p*

Tutti

17 Ky - ri - e e - lei - son,

lei - son Ky - ri - e e - lei - son,

8 Ky - ri - e e - lei - son,

Ky - ri - e e - lei - son,

f *ff*

25

lei - - - son.

lei - - - son.

e - lei - - - son.

lei - - - son.

28 **Allegro Moderato**

f Ky - ri - e, Ky - ri - e e - lei - son,

f Ky - ri - e, Ky - ri - e e - lei - son,

f Ky - ri - e, Ky - ri - e e - lei - son,

f Ky - ri - e, Ky - ri - e e - lei - son,

f *fz*

Yet there are elements of junction as well, the half-cadence ending the Adagio being only the most prominent among them. Less obvious, though equally present (if only

subliminally), is the role played by chromatic completion. The two missing pitches appear rapidly: D in the very first chord, and B early in the second measure of the Allegro, where it is quite audible as the first chromatic tone to appear in the new tempo.²⁶ The two sections are thus linked by a bond of subconscious expectation, explainable on harmonic grounds (our traditional understanding), or on grounds of chromatic completion. I am arguing, of course, for the presence of both.

5. The Surprising Design of the Heiligmesse

The one late Mass from which I have yet to offer a sample is the *Heiligmesse* of 1796. I saved it for last because an analysis in terms of chromatic completion reveals that its great complexity and remarkable inner variety are built upon a surprisingly simple, unifying underlying design: an emphasis upon D-flat and E natural as the implicit points of aggregate completion.²⁷ Not only is this design carried out consistently across this very large-scale work, it is employed with expressive intent. There is emotional and theological significance to every point of completion and non-completion.

In keeping with Martin Chusid's analysis of this and the other Esterházy Masses,²⁸ I will consider the *Heiligmesse* in terms of symphonic structure. As Chusid maintains, three "symphonies" can be indentified within each late Mass, with each symphony containing four movements (just as a late Haydn orchestral symphony). From this perspective, the opening movement of the first symphony is the Kyrie, and it begins and concludes with cycles having D-flat as their goals. Each of these goals appears crucial to the drama, musical and otherwise, of the movement. For example,

the first D-flat is found in bar 29. Immediately there follows a powerful cadence on the dominant, after which the chorus startlingly changes texture and begins a fugato.²⁹ Before this point the music has been entirely homophonic.

The Gloria's first cycle also has D-flat as its goal.³⁰ It arrives at bar 40 with a sudden hush as the tonality, without any preparation, shifts from B-flat major (never in doubt before) to D-flat major. The chorus, in awe and with humility, sings "Adoramus te." Then, as swiftly as he had shifted our musical, tonal, and emotional focus, Haydn returns to B-flat major (bar 44) for an exuberant "Glorificamus te."

The Gratias has two cycles, each with D-flat as a goal. Again, these moments are expressively significant. The first cycle ends with E and D-flat arriving simultaneously at bar 88, just as the sacred text asserts "Pater omnipotens." Haydn backs this moment up with powerful orchestration and with a firm cadence in the tonic at bar 90, after which the quartet of soloists is superseded (for the first time in this movement) by the chorus, tutti, affirming the same words, only louder! Immediately thereafter, the text shifts its focus to the second person of the Holy Trinity: "Domine Fili unigenite."³¹ The final cycle of the Gratias begins with the words "Qui tollis peccata mundi." It unfolds only eleven tones. As the movement ends, the ear is left desiring an E natural, which never arrives. It is, however, the *first* chromatic tone heard in the Quoniam.³² The Quoniam likewise ends with an eleven-note cycle, only now it is D-flat that is lacking. Thus the first of the three "vocal symphonies" ends with a gap: an absent D-flat. So, as we shall see, do the second and third of the symphonies in Chusid's model.

The opening section of the ensuing Credo continues the musical drama; a drama, in terms of *Gestalt* psychology, of a delayed realization of an implicit pattern, because no

D-flat is heard in it, either. When that pitch is, at long last, finally heard, it comes at a point of tremendous meaning: at bar 86 of the “Et incarnatus,” immediately after “crucifixus,” emotionally the darkest word in the Mass. In the second cycle of this movement attention is shifted to E natural, for this cycle only unfolds eleven pitches with E being the missing tone. Once again, Haydn links movements by means of chromatic completion, for E natural arrives early in the ensuing “Et resurrexit” during the phrase “et ascendit in coeli.”³³ The utter difference between Christ being lifted up to die on a cross, and then lifted up to ascend to his Father are made technically akin by being consecutive points of chromatic completion.

Early in this, the third movement of the middle symphony, we have a near-saturation of musical space. [Example 8] Yet a pitch is still missing: D-flat. Eventually that pitch will sound, but the wait is enormous, and therefore very dramatic. It finally arrives as its enharmonic equivalent C-sharp in bar 216, over ninety measures into the movement (which begins at bar 120).³⁴ Moreover, it comes just moments before the movement ends, in the penultimate measure of choral sound. What is being sung? The word “mortuorum.” Once again, Haydn uses chromatic completion in relation to the idea of death.

Example 8: *Heiligmesse, Credo*, mm. 210-224

210
S et ex - spe - cto re - sur - re - cti - o - nem mor - tu - o - rum.
A et ex - spe - cto re - sur - re - cti - o - nem mor - tu - o - rum.
T et ex - spe - cto re - sur - re - cti - o - nem mor - tu - o - rum.
B et ex - spe - cto re - sur - re - cti - o - nem mor - tu - o - rum.
Orch. *p*

Vivace assai.
216 *f*
rum. Et vi - tam ven - tu - ri
rum. A - men
rum. *f*

Only the briefest of moments later, movement four of the second symphony begins at bar 222 of the Credo, at “Et vitam venturi,” with a sudden shift in both tempo and tonality, and with just as sudden an assertion of life renewed. D-flat once again

returns as the focus of our expectations, because this movement (and thus the “second symphony” as a whole) ends with every other member of the aggregate expressed.

Just as before, with the long-extended “link” between the first two “vocal symphonies,” Haydn now raises expectations for a “completing” D-flat. We long for it. Yet surprisingly, that tone does not appear in the movement that opens the third symphony (the Sanctus). It, too, makes use of only eleven tones. No D-flat in earshot. The following Benedictus begins with a cycle which unfolds E natural as its eleventh tone and then, finally(!), we hear the long-awaited D-flat. It arrives as the twelfth and completing tone not only of a “long” cycle (which has taken place over three movements, and across the divide of two vocal symphonies) but likewise of a “short” cycle which began as the Benedictus, itself, began.³⁵

There is an important fact to be observed about this moment of aggregate completion. Not only does it complete this exceedingly long cycle stretching across several “symphonic” movements, it is locally important to the design of the Benedictus. In slow sonata form, the exposition of this movement ends with the choir’s cadence in the dominant at bar 54. The D-flat predominates from bar 46 through bar 49, in the preparation for that cadence.³⁶ In the Benedictus, taken simply by itself, the first cycle ends with E and D-flat as the penultimate and ultimate tones to unfold. Interestingly, Haydn gives these two crucial pitches a similar emphasis, but in reverse in his next cycle: now C-sharp is the eleventh and E, the twelfth, tone.³⁷ It seems hardly accidental that the final chromatic tone in the movement is likewise a D-flat.

The Agnus Dei, the third movement of the concluding symphony, lies somewhat to the side of this design, yet in a way that can be seen as consonant with it. It is a

modulatory movement, in effect a prelude to the concluding “Dona nobis pacem.” Importantly, from expressive and theological points-of-view, each of its three cries for mercy is incomplete. The first, in B-flat minor, lacks a D; the second, in D-flat major, a G; the third, in E-flat minor, likewise a G.³⁸ That missing G is heard in the very first measure of the Dona, the movement which concludes the Mass. It is, however, present there as a *diatonic* tone: the sixth degree of the scale in the key of B-flat major, and this is the key in which the Dona bursts forth, the main key, of course, of the Mass itself. Given this tonal context, what are the first two chromatic tones to be heard in the Dona? Tones, therefore, that will stand out to the ear? Our old friends, E and C-sharp. The movement then completes its aggregate, and starts a second cycle. Yet this cycle is unfulfilled. Eleven tones are heard; absent is D-flat.³⁹

That Haydn, in this Mass, has created a world of sound in which D-flat, and to a lesser degree, E natural, come to be distinct goals of our unconscious expectations, appears clear enough. In light of this, it is worth remembering that the only pitch missing from the Adagio introduction to the Kyrie, the opening section of the opening movement of this massive composition, was D-flat.⁴⁰

From a theoretical standpoint, what makes all this additionally striking is that the emphasis in this Mass upon D-flat and E as goals of expectation is a design *independent* of key-relations, and is heard despite the existence of many modulations across its roughly thirty-five minutes. Nor are all these modulations internal; the composition has movements with E-flat, G, and C as their tonal centers, not just B-flat. This fact makes clear that chromatic completion was a separate compositional parameter in Haydn’s mind, and not merely an unintended epiphenomenon of the employment of other, more

traditionally recognized techniques. Nor is this really surprising. Everyone knows that a composer may (or may not) parallel shifts in orchestration with shifts in tonality, or tempo, or musical texture. Still, he is by no means obligated to do so. Thus we grant theoretical independence to these parameters even if, in an actual passage of music, they all align.

So it is with chromatic completion, a fully independent technique that Haydn, artist that he so gloriously was, would most often use in clear conjunction with other, far less radical, techniques. It is for just that reason, I believe, that this technique has “hidden in plain sight” for so long.⁴¹

In my doctoral thesis, I wrote at length of an unacknowledged “tradition” among eighteenth-century composers to work, in dramatic juxtaposition, with both the complete aggregate and its imperfect, eleven-note form. And with the exception of Gluck, and possibly to some degree Bach and (of all people) Georg Vogler, I believe that tradition was a “pre-conscious” or instinctive one.⁴² In the *Heiligmesse*, as I trust I have illustrated, Haydn worked with that tradition in a way that had artistic grandeur and almost certainly conscious intent. When he stopped at eleven members of the aggregate, it was always with a deeply expressive purpose.

6. Haydn and Aesthetic Realism

Perhaps, too, it was with an equally profound philosophic purpose: to imply there was still room for mystery; room, as a composition ends, for the music to imply something beyond itself. This, according to Aesthetic Realism, is a crucial matter in

world art.⁴³ The arts, Eli Siegel explained, reflect the permanent hopes of humanity, and these inevitably come in pairs.⁴⁴

Whether one considers literature, the visual arts, theatre, film, music, or simply life itself, there are twin values people long for, values present in *every* culture, though quite clearly in unique ways. We desire the definite, the clear, the world as “graspable,” yet we also yearn for the indefinite, the mysterious, the world as large enough to be always beyond our grasp.

The best thought of Haydn’s own day tended to affirm this. For example, Johann Wolfgang von Goethe, the greatest poet of German Classicism, declared:

Der Mensch ist nicht eher	Man will not rest until his
glücklich, als bis sein unbedingtes	limitless striving sets itself its
Streben sich selbst seine	own limitations.
Begrenzung bestimmt.	

And yet he also said:

Niemand, wenn er auch noch	No man, however much he may
soviel besitzt, kann ohne	possess, can live on without
Sehnsucht bestehen, die wahre	longing; true longing must be
Sehnsucht aber muss gegen ein	directed towards the
Unerreichbares gerichtet sein.	unattainable. ⁴⁵

In Haydn’s era the duality here considered was often presented in terms of a contrast between the “beautiful” and the “sublime.” Yet it would be a mistake to think

such contrasting ideas were characteristic only of Enlightenment thought. On a strictly technical basis, European music from at least from the time of the trouvères has recognized the need for the bounded and the unbounded, the closed and the open, *clus* and *ouvert*. Every period in music history has honored these opposites, though the actual symbolic procedures by which the dialectic was honored did vary.⁴⁶ In the Baroque, for example, the full and half-cadence often expressed the point. This was most obvious in vocal composition, because the presence of words could clarify such far-ranging implications.

What I am suggesting here in the concluding portion of this essay is that in the eighteenth century, and very definitely in the late vocal music of Haydn, the use of incomplete and complete chromatic saturation was a means of accomplishing the same thing: making a philosophic point. And taken in the widest possible perspective, these technical considerations can point us towards something far beyond the merely technical, what Aesthetic Realism presents as everyone's *deepest* desire: to like the world on an honest basis. Eli Siegel has said that the greatest thing that can happen to a human mind is to see reality as having a structure akin to the structure of art, to see that the world, too, as the "aesthetic oneness of opposites."⁴⁷ When we see the world this way, it makes solid, beautiful sense.

In life, finite and infinite, the incomplete and the complete, are among the most important opposites people meet. They are part of our "daily fare," implicit in every experience we have. A question well-worth pursuing, then, is to what degree did Haydn's famous good cheer result from his feeling, however subconsciously, that these opposites were coherent?⁴⁸ My own feeling is that it was very much so.

Throughout this essay I have commented on how Haydn dealt with dialectical issues in a technical manner. Chromatic completion seems to me to have been a creative procedure by which, in work after work, this great composer was able to reconcile such elemental aesthetic opposites as the relation of structure and surprise, the complete and the incomplete, and in a particularly profound way, the opposites of continuity and discontinuity.

The need to feel, in a convincing manner, that two musical units are at once joined and distinct, is, I believe, an enduring need of musical aesthetics. In a trailblazing essay from the December 1955 issue of *The Journal of Aesthetics and Art Criticism*, Eli Siegel asked a question which sheds powerful light upon it, and by extension, on the artistic success of the many musical examples we have just studied:

Is there to be found in every work of art a certain progression, a certain indissoluble presence of relation, a design which makes for continuity?—and is there to be found, also, the discreteness, the individuality, the brokenness of things: the principle of discontinuity? ⁴⁹

With this provocative, insightful, wonderful question, I end my essay; and yet (in keeping with the opposites) I trust that interest in the core issue raised in it—the existence of chromatic completion in Haydn’s music—will continue.

¹ *Chromatic Completion in the Late Vocal Music of Haydn and Mozart: A Technical, Philosophic, and Historical Study*. (New York University, 2008).

² These examples—and also those to follow from the *Theresienmesse*—were the core of my paper “Haydn’s Secret *Dodecaphonic* Art,” delivered at the 2006 Annual Meeting of the American Musicological Society, Los Angeles.

³ Analyzed in F major. Order of arrival: C-sharp (bar 62); E-flat (bar 63); F-sharp (bar 64); A-flat/B (bar 66). Moreover, bars 31-39 of this movement, an earlier setting of the same words, also presents all twelve tones in gradual unfolding.

NOTE: As the order of an unfolding cycle is presented, the procedure will be different for the major mode and the minor. In the major, note will be taken only of the appearance of the five chromatic tones—unless there is reason to draw attention to the late arrival of one of the seven diatonic tones. The minor mode, technically, has only three chromatic tones since, typically, the sixth and seventh degrees make use of both the raised and the flattened forms. However, in order to demonstrate that a complete unfolding has occurred, account will be taken of the appearance of all these tones: the three chromatic ones, and the double forms of the sixth and seventh degrees.

NOTE: When two (or more) chromatic tones arrive simultaneously, they will be presented in vertical order, moving from the lowest note upwards.

⁴ Analyzed in F major. Order of arrival: C-sharp (bar 56), E-flat (bar 57), F-sharp (bar 58), A-flat/B (bar 63).

In this example from the *Theresienmesse* Haydn also coordinates the technique of chromatic completion with a far more familiar musical technique: delineating musical sections by means of a change in instrumental or vocal forces. This short *Christe* is the only portion of the central *Allegro* in this opening Mass movement to be scored for a quartet of solo voices, the remainder making use

of the full choir.

- 5 Cited in Martha Baird, *Two Aesthetic Realism Papers: Opposites in the Drama; Opposites in Myself*. (New York: Definition Press, 1971), p.v.
- 6 In C minor. Cycle 1: D-flat (bar 1), A-flat (bar 1), A (bar 1), B-flat (bar 2), E (bar 3), G-flat (bar 4), B (bar 4). Cycle 2: A (bar 5), B-flat (bar 5), E (bar 6), A/F-sharp (bar.6), B (bar 6), D-flat (bar 7).
- 7 In C minor. A-flat (bar 7), B-flat (bar 7), A (bar 7), D-flat/G-flat (bar 8), B (bar 9).
- 8 Bar 17. (For the purpose of this analysis, I have designated the first measure of this passage, rather than the first measure of the Credo as a whole, m.1). The relation to “The Representation of Chaos” is patent. Moreover, as I have noted in several talks and publications, the word “Licht” likewise falls at a moment of chromatic completion. Moreover, again, the twelfth tone to arrive is the E natural.
- 9 Its “Janus-like” nature, looking forward and yet backward, is noted, and commented on by James Dack in his essay on Haydn’s sacred music which forms chapter 10 of *The Cambridge Companion to Haydn*, ed. Caryl Clark (Cambridge: Cambridge University Press, 2005). See p.144, in particular. See also Chapter 7 of my thesis, especially pp. 342-345. As a whole, the chapter argues for Gluck having pointed both Haydn and Mozart in the direction of chromatic completion as a compositional tool.
- 10 A similar point can be made about the “Et Incarnatus” of the *Nelson Mass*. Set in G major, its opening cycle requires thirty measures to unfold, and its final constituent is B-flat: the “dark” minor third. Where does that depressive tone arrive? In the thirtieth measure of this section, just as Haydn arrives at the terribly painful words, “Crucifixus etiam pro nobis.” (D-sharp had arrived in bar 1; C-sharp in bar 2; F in bar 5; and G-sharp in bar 24).

Haydn could not have chosen a more expressive moment to conclude this cycle—expressive both in terms of human feeling, and theological import. And once again, note his interest in the relation of Life and Death—for in a composition that begins with Birth (“incarnatus est”) it is notable that the first completion of the chromatic aggregate occurs at the moment of Death. It seems clear that Haydn wished to mark this point of arrival strongly for a listener’s awareness. Not only is there that very dramatic shift of modality from G major to G minor, immediately afterwards (in bar 31) he makes equally dramatic gestures in his orchestration. The timpani and the trumpets (clarini) suddenly arrive *fp* in a rhythmic pattern which clearly was designed to remind the listener of the very opening of the Mass. And there is a sudden hush in the chorus as they sing “sub Pontio Pilato.”

¹¹ Bars 17-29

¹² For a careful, yet compact, consideration of the expressive roles which the major and the minor third have played across the history of western music, see Deryck Cooke, *The Language of Music*. (Oxford: Oxford University Press, 1959), esp. pp.51-64.

¹³ The cycle begins with bar 9 of the Vivace, since the opening eight measures can be considered a “diatonic coda” to the previous cycle. Order of arrival: F-sharp (bar 9); B-flat (bar 17), C-sharp (bar 18), G-sharp (bar 23), E-flat (bar 37).

¹⁴ In terms of aesthetics, it is significant that while the earlier cycle *links* death and life, this one *separates* them. Crucial to the full power of aesthetics, Eli Siegel has explained, is the artistic need to present opposites both as starkly separate yet ultimately one. See Chapter 10 of “The Opposites Theory,” written in the late 1950s, and published in serialized form in 2007 in *The Right of Aesthetic Realism to Be Known*. Chapter 10 appears in issue 1696 (July 11, 2007). See, esp., p.2.

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- ¹⁵ Peter Kivy, *The Corded Shell: Reflections on Musical Expression* (Princeton: Princeton University Press, 1980), p. 101.
- ¹⁶ In C: B-flat (bar 4), A-flat (bar 6), G-flat (bar 6), D-flat (bar 7), E-flat (bar 8).
- ¹⁷ In C: F-sharp (bar 3), B-flat/C-sharp (bar 21), G-sharp (bar 29), D-sharp (bar 63).
- ¹⁸ In C: F-sharp (bar 5), C-sharp (bar 10), G-sharp (bar 12), B-flat (bar 13). E-flat (bar 34)— bar 1 of the “Et Incarnatus.”
- ¹⁹ In C. B-flat (bar 6), C-sharp (bar 6), G-sharp (bar 7), F-sharp (bar 11), E-flat (bar 15)—the second bar of the “Pleni.”
- ²⁰ However, note: the first two statements of the “Agnus Dei,” taken together, comprise a single cycle of chromatic completion. F-sharp (bar 4), E-flat (bar 6), B-natural (bar 7), A-flat (bar 16), and C-sharp (bar 30).
- ²¹ In C. (Beginning the measure count with the “Allegro on spirito”) F-sharp (bar 12), C-sharp (bar 19), B-flat (bar 21), G-sharp (bar 22), E-flat (bar 113). Note: one could actually begin this cycle earlier, with the third statement of the “Agnus Dei.” The point of chromatic completion would be the same.
- ²² In D major. D-sharp (bar 13), G-sharp (bar 14), A-sharp (bar 48), E-sharp (bar 51), C (bar 78).
- ²³ C major. B-flat (bar 4), A-flat (bar 6), D-flat (bar 7), G-flat (bar 7), E-flat (bar 8).

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- ²⁴ H.R. Robbins-Landon, *Haydn: The Years of The Creation—1796-1800*. (Bloomington: Indiana University Press, 1977), p. 164. He also makes this observation: “The symphonic introduction fulfils the same spiritual basis as in the ‘Military’ Symphony.” (Ibid, p.165). It is an true comparison, for though Robbins-Landon does not explicitly draw out the point, it is clear that its Allegro and its opening Adagio also share an *Urlinie*. But the comparison is apt in yet another regard, which its author apparently did not see: the Adagio of Symphony No. 100 likewise sets itself off by means of chromatic completion—only in this case, two full cycles are present. In G: Cycle 1: C-sharp (bar 7), G-sharp/F (bar 9), E-flat (bar 10), B-flat (bar 14). Cycle 2: F (bar 15), E-flat (bar 16), A-flat /B-flat (bar 17), C-sharp (bar 20).
- ²⁵ In B-flat. E (bar 2), B (bar 7), F-sharp (bar 7), A-flat (bar 14), D-flat (bar 19).
- ²⁶ In B-flat. E (bar 21), D-flat (bar 22), G-flat (bar 23), A-flat (bar 25), B (bar 30).
- ²⁷ Another of the fifteen questions Eli Siegel asks in the previously cited 1955 essay is this, under the heading, “Oneness and Manyness”—“Is there in every work of art something which shows reality as one and also something which shows reality as many and diverse?—must every work of art have a simultaneous presence of oneness and manyness, unity and variety?”
- ²⁸ See Martin Chusid, “Some Observations on Liturgy, Text and Structure in Haydn’s Late Masses.” *Studies in Eighteenth-Century Music: A Tribute to Karl Geiringer on His Seventieth Birthday*, H.C. Robbins Landon, ed. (New York: Oxford University Press: 1970), pp. 125-135.
- ²⁹ In B-flat. A-flat (bar 3); G-flat (bar 5); E (bar 7); B (bar 8); D-flat (bar 29).
- ³⁰ In B-flat. F-sharp (bar 17); E (bar 18; B (bar 24); G-sharp (bar 27); D-flat (bar 40).

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- 31 In G minor. F-sharp (bar 67); F (bar 68); E-flat (bar 69); B (bar 80); A-flat (bar 80); E/D-flat (bar 88).
- 32 In G minor. E-flat (bar 137); A-flat (bar 137); D-flat (bar 138); F (bar 138); F-sharp (bar 179); B (bar 180); E (bar 223).
- 33 In E-flat; C-flat (bar 88); G-flat (bar 88); D-flat (bar 90); A (bar 91); E (bar 127).
- 34 In B-flat; A-flat (bar 121); F-sharp (bar 122); B (bar 123); E (bar 127); C-sharp (bar 216).
- 35 In E-flat; A (bar 7); F-sharp (bar 28); B (bar 29); E (bar 46); D-flat (bar 49).
- 36 Technically, this is a case of “chromatic saturation” closely approximating true chromatic completion: that is, the twelfth note arrives *near* a crucial point of structural or expressive concern, rather than directly on it. In my thesis, *op. cit.*, I deal at length with this issue. See, in particular, pp. 130-150.
- 37 In E-flat: B (bar 50); A (bar 51); F-sharp (bar 59); C-sharp (bar 65); E (bar 72).
- 38 In B-flat minor: G-flat (bar 1); A (bar 3); A-flat (bar 8); E (bar 8); C-flat (bar 13); G (bar.16).
In D-flat major: D (bar 25); C-flat (bar 25); E (bar 26); A (bar 27).
In E-flat minor: C-flat (bar 34); D (bar 27); A/C (bar 39); D-flat (bar 40); E (bar 43).
- 39 In B-flat. Cycle 1: E (bar 62); C-sharp (bar 64); F-sharp (bar 66); A-flat (bar 97); B (bar 107).
Cycle 2: E (bar 108); F-sharp (bar 131); B (bar 138); A-flat (bar 145).

40 In B-flat: A-flat (bar 3); G-flat (bar 5); E (bar 7); B (bar 8).

41 I am not the first scholar to ponder these matters, nor to find examples of chromatic completion from the Classical Era. Special honor goes to James M. Baker, and Henry Burnett; they were the first to unearth this “secret dodecaphonic art”—though they preferred the term *chromatic saturation*, which, to my mind, doesn’t bring adequate emphasis to the moment at which the twelfth tone arrives: the moment of *completion*. As I have been showing, that moment of completion matters very deeply; matters aesthetically; matters emotionally. Also, their emphasis in on Mozart, rather than Haydn.

42 See Chapters 6, 7, and 8: pp. 249-404.

43 For a compact presentation of his life and work, see my biography essay: <http://knol.google.com/k/eli-siegel#>. For an equally short presentation of the relation of his work to that of other philosophers who, more recently, have also employed the term “Aesthetic Realism,” though with a very different intent and set of premises, see my essay “A note on Two Conceptions of Aesthetic Realism,” published in the *British Journal of Aesthetics*, vol. 45, No. 4. (October, 2005).

44 See Eli Siegel’s lecture of 31 July 1964, titled “We are Emotion,” edited (with commentary) by Martha Baird. (New York: Society for Aesthetic Realism, 1964), esp. pp. 5-11.

45 These lovely and meaningfully contradictory statements are cited, respectively (and in English translation) on pp. 102-103, and pp. 60-61 of Ungar: 1963, op. cit. For an extended study of the drama of the finite and the infinite in Goethe’s mind—as man and as artist—see Barker Fairley’s masterful book *Goethe, as Revealed in His Poetry*. (New York: Frederick Ungar Publishing Co., 1963.

⁴⁶ I am, in effect, suggesting a “figure/ground” approach to the study of both music history and music theory. The “ground” of all human music-making is what Eli Siegel described: the inevitable and constant human need to make opposites one. The “figure” is, at any given time and place, the specific techniques employed. These have been astonishingly diverse; and will only grow more so.

⁴⁷ The full principle is “The world, art, and self explain each other: each is the aesthetic oneness of opposites.” See Eli Siegel, *The Modern Quarterly Beginnings of Aesthetic Realism: 1922-1923*. (New York: Definition Press, 1969), back cover.

⁴⁸ In 1988, I gave a talk on Haydn somewhat exploring these matters. It was for a general audience, part of a seminar given at the Aesthetic Realism Foundation in New York City, under the title “What Will Have a Man Really Sure of Himself?” I’ve posted the text on my website: www.edgreenmusic.org/Haydn-eg.html

⁴⁹ Cited in Kranz, 1969, p.105. The essay appeared originally in the *Journal of Aesthetics and Art Criticism*, vol. 14/2 (December 1955), where this question was found pp.105-106.