Considering Elliott Carter's Harmonic Process through Sketch Study

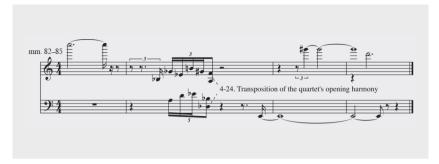
by John Aylward

Much has been written about the kinds of harmonies Elliott Carter uses in his music. From Carter's *Harmony Book* to the numerous articles published on his use of all-interval tetrachords, writings on Carter's raw materials abound. A far less substantial literature is available on his compositional techniques regarding these harmonies, and yet, the fact that we now know so much about them allows us to ask more penetrating questions. What does Carter consider when deciding upon a progression of harmony? What harmonic relationships does he wish to make vivid on the surface of his music? How do his compositional decisions regarding harmony motivate form?

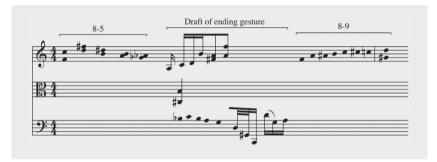
One of the most fruitful ways of addressing these questions is to look at how Carter initially constructs harmonic relationships in his sketches. Within Carter's sketchbooks, we can find not only the harmonic content often discussed, but also clues as to his methodology for constructing actual progressions. Sketch study can also clarify Carter's harmonic intent in cases where the score is not fully illuminating.

Consider one of the more harmonically obscure passages from Carter's *Fifth String Quartet* (1995): the very end of "Interlude No. 1." Carter makes a point to end the first interlude with a transposition of the work's opening harmony (*Example 1*). The relationship by transposition is clear, but it is difficult to discern the harmonic content of the entire gesture leading up to the transposed chord. Is the entire gesture one harmony? Should we hear the final attack as a separate harmony? Does this gesture have a relationship to the beginning of the "Lento espressivo," which overlaps with the interlude's ending?

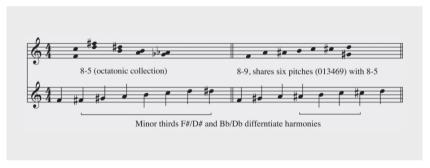
It is reasonable to hear the gesture as one harmony, but closer analysis shows that the chord looks contextually anomalous; 01235679t (Forte name 9-11) is not featured elsewhere in the work, and Carter has built the harmonic framework of the quartet around four- and eight-note chords, not nine-note chords.² We could parse these nine notes in a variety of ways, but it is hard to devise a method for understanding Carter's com-



Example 1: End of "Interlude No. 1" and beginning of "Lento espressivo."



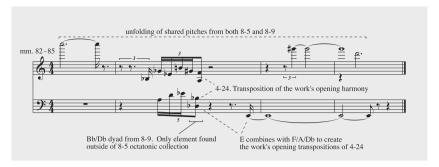
Example 2: Rendering from excerpt of sketchbook page, dated April 9, 1995.



Example 3: Analysis of sketchbook harmonies.

positional decision by simply isolating some groups of notes while dismissing others.

In the sketchbooks, we find a draft of this moment on a page dated "April 9th, 1995" (Example 2).³ This page contains numerous drafts of the "Lento espressivo." One part of this page contains two harmonies, 8-5 (octatonic) and 8-9, separated by an attempt to draft the closing gesture to "Interlude No. 1." The draft clearly demonstrates Carter's desire to end the first violin's gesture with the F/A dyad – a dyad prominently featured in the work's opening.



Example 4

Chord 8-5 is arranged in a fashion similar to an arrangement in Carter's *Harmony Book*. Carter separates the dyad D/G#, perhaps because he is considering a chord that features this tritone. He also arranges the octatonic chord in groups of dyads – another arrangement somewhat similar to the *Harmony Book*.

These two chords are further analyzed in *Example 3*. Notice that the sketched chords share six pitches and differ only by the displacement of a minor third dyad. If the F#/D# dyad is added to the six shared pitches, 8-5 is generated. If the Bb/Db dyad is added, 8-9 is generated. The gesture itself features rhyming minor thirds and major sixths, a surface detail that highlights the only difference between the two harmonies. If we let the sketch inform our analysis, we find that Carter is most interested in expressing an octatonic collection. The contrasting minor thirds both highlight the octatonic collection and extend it into the 8-9 harmony.

The prominent harmony within the very end of the gesture, the 4-24 chord, is not found within Carter's chosen octatonic transposition. Carter achieves this tetrachord by borrowing the Bb/Db minor third from the 8-9 harmony. Knowing this, we can interpret the final tetrachord as having an element of tension. Its Bb/Db dyad pushes against the sounding octatonic collection while completing the 8-9 harmony. The A/F dyad is familiar to both collections, and so we can hear this other half of the final attack as stable. The confluence of these two dyads creates a moment where the work's opening harmony is re-contextualized as having elements of stability and tension.

If we hear this final gesture as integrating these two eight-note chords, we can also find a place for the first high pitches of the "Lento espressivo." The C, G#, and D are three pitches common to both harmonies (*Example 4*). The E in the low register is not part of either the 8-5 or the 8-9 harmonies, and so we could interpret it as anticipating the following music of the "Lento espressivo." However, the E has a compelling relationship to the climactic 4-24 chord. It can be combined with the F, A, and Db to form the transposition of 4-24 used at the work's opening.

The interchangeability of the E in this context highlights how Carter takes advantage of the whole tone triad (048) within the 4-24 chord. There is a powerful sounding of the F, A, Db trichord, as part of two versions of 4-24, at the same time that a separate whole-tone trichord (C, E, G#) unfolds. Carter references the work's initial harmonic content while providing a new transposition of it that looks forward.

These interpretations of this short excerpt, gained through sketch study, provide an opportunity to hear Carter's music differently. While we most likely hear this excerpt as containing one harmony, the sketches reveal that Carter uses two harmonies related by an octatonic collection. Also, we may not hear any connection between the end of "Interlude No. 1" and the beginning of the "Lento espressivo," but the sketches show that the opening of the "Lento espressivo" is harmonically linked to the interlude's closing gesture. While it is possible to reach these conclusions through study of the score alone, they would be difficult and ultimately unsubstantiated. The sketch work clearly substantiates this interpretation of the passage and provides an insight into how Carter intends the passage to be heard.

¹ Elliott Carter, *Harmony Book*, ed. by Nicholas Hopkins and John F. Link (New York: Carl Fischer, 2002).

² This article primarily uses Carter's nomenclature for chord designation. This is the only time that I reference Forte's system.

³ Elliott Carter's sketches for *String Quartet No. 5*, "Interlude No. 1," preserved at the Elliott Carter Collection, Paul Sacher Foundation, Basel.