

Analysis of Stravinsky's *Three Pieces for String Quartet*, III

In Western tonal music, theoreticians typically contrast the vertical aspects of music with its horizontal aspects, the former addressing what happens at a specific point in time in all voices and the latter addressing what occurs in a single voice throughout the passage of time. This dichotomy also acts as the foundation for the two basic branches of music theory known as harmony and counterpoint. In atonal music, discussions of harmony and counterpoint may be impossible, but vertical and horizontal aspects of the music are still worth investigating. Piece III from Stravinsky's *Three Pieces for String Quartet* provides a good representation of tight control over both the linear relations of each voice as well as the resultant atonal "chords" that arise from the progression of the four voices in an atonal setting.

If we take a look at mm. 3-7, which I refer to as part **A**¹ in the formal sketch of **Figure 1**, we can easily see how Stravinsky provides unity on both horizontal and vertical levels. Stravinsky gives each instrument its own limited supply of available notes in these measures, with the pitch content of both violins being restricted to the [013] set class (at transformation T_3I for the first violin and at transformation T_8I for the second violin) and the viola and cello lines having their pitch content delimited to set class [012], ignoring a blip at the beginning of bar 6. This blip in bar 6 makes more sense once the pitch content of the vertical sonorities in the surrounding bars is examined. The pitch content of most of the vertical sonorities falls into either set class [0148] or [0146], and this includes the second "chord" of bar 6 where the viola rises to the new note of G^b . The first "chord" of bar 6, with the G^b in the cello, has pitch content in the [0157] set class, however; while this new vertical sonority might come as a surprise, perhaps it acts as some sort of climatic relief to the similar pitch content of the bars around it.

Examining the other **A** sections in this first part of the piece reveals a similar compositional technique, although the complexity with which it is executed becomes greater. In mm. 3-7, the use of three note sets for all voices creates only a few different resulting vertical sonorities. In mm. 10-14, however, the two lower instruments each separately carry pitch content that almost exclusively falls into the [012345] hexachordal set class. With a separate number of members in the sets of the upper voices versus the lower voices, Stravinsky continuously rotates the notes in each voice to create a steady stream of different and constantly changing vertical sonorities. For the most part, though, the pitch content of these sonorities is contained by set classes [0146], [0148], or [0157] just as in the preceding **A** section; additionally, some of the pitch content falls into a new [0147] set class, although this new set class seems quite similar to those previously used. The **A**³ section of bars 17-21 and the more registrally-open area of mm. 27-29 also show patterns of controlled pitch content in both each individual voice as well as each individual resultant sonority.

Some of these same vertically-sounded set classes are also explicated in the recurring **B** section motive that first appears in bars 8-9, duplicated identically through the rest of the first half of the piece and reappearing in literal yet transposed, truncated, and slower versions near the end of the piece. For example, in mm. 8-9, the pitch content of the first and last vertical

sonorities belongs to [0146] and [0147] respectively. Arguably, the reappearance of this **B** theme in the last section, squeezed between a few instances of a single held sonority of harmonics, tends to make those ethereal chords in bars 38, 41, and 44 almost seem like compressed versions of the **A** theme, with pitch content that belongs to set class [01248], thus including sonorities much like those outlined in the previous **A** sections. The large-scale form of the piece, which may seem multi-partite at first, could even be viewed as a pseudo-rounded binary form, with sections of **I-II-I'**. As further evidence of this large-scale form, **Figure 1** shows the possibly related internal form of the **I** and the **III** sections, specifically how the organization of **B** parts and their interruptions have an almost palindrome-like quality for both sections. This final **III** section at the end, though, is in a highly changed state from its potential original iteration as section **I**.

This change that the final section undergoes seems to be the result of a process related to the progressive nature of the piece's form. For example, the first chord of the piece has pitch content belonging to set class [01478] whereas the final chord (in bar 45) has pitch content belonging to set class [012468]. Some of the common vertically-sounded set classes in the piece, such as [0146], [0147], [0148] are subsets of one these larger set classes, with the piece possibly acting as an elaborated transition between the opening and closing sonorities. In fact, much as the **A** theme had been possibly packed into a single chord in bars, 38, 41, and 44, the whole piece almost seems compressed into (or to have grown out of) this closing sonority. The more open and airy sounds near the end of the piece belie this possible compression or germinal process.

In any event, the most salient aspect of this piece appears to be how Stravinsky rotates and alternates the limited members of distinct set classes in each of the voices to create a consistently recurring pattern of vertical sonorities with similar pitch class content. Stravinsky moves from relatively simple instances of this method, though more complicated rotations, finally boiling the piece down to a homogenous whole. While I have necessarily left certain facets of the piece out of the discussion, the remaining features seem related if not subordinate to these main features.

Figure 1: Analysis of Form: Stravinsky's *3 Pieces for String Quartet, III*

