
ANALYTICAL PERSPECTIVES

Article received on September 5th 2017
Article accepted on November 13th 2017
UDC: 785.72
78.071 Скали Ц.

*Nico Schüler**

Texas State University

ANALYTICAL OBSERVATIONS OF *DUALITY IN TIME* BY JAMES (JIM) C. SCULLY¹

Abstract: This paper offers an analysis of *Duality in Time* for flute and violoncello by Californian composer James (Jim) C. Scully (b. 1972), which was composed for a composition competition in 2009, for the which the composer had 60 minutes to write the piece and the performers 60 minutes to rehearse it. The analytical observations focus primarily on melody / motives, pitch collections, vertical sonorities / harmony, rhythm, form, texture, and instrumentation. The paper includes an analytical score of the composition.

Key words: James (Jim) C. Scully, *Duality in Time*, flute, violoncello, analysis

In 2010, I was asked if I wanted to participate in a collaborative conference project (for the 2010 College Music Society conference), for which composers

* Author contact information: nico.schuler@txstate.edu

¹ Sound example is available online at the official New Sound YouTube channel. Please find the playlist here: https://www.youtube.com/watch?v=GZt_2SKutBY&list=PLNFG-wrMs0-Xzo9GYGsuBaxxOc6704_IUJ

would – anonymously – submit a composition, which would then be analyzed by music scholar. The analysis was to be presented at the conference, followed by a performance of the composition. The goal was an intra-disciplinary collaboration between composers, performers, and music scholars. Below is my analysis of the composition *Duality in Time*, which, as I would learn in the midst of my analytical undertaking, was composed by California composer James (Jim) Scully. The focus (or goal) of the analysis was not specified by the conference organizers, and thus I had the freedom to include as many of the musical elements and parameters in my analytical observations as possible. The audience of my analytical observations received my analytical score, which is re-printed here with the permission by the composer.

* * *

Duality in Time is a fast-paced duet for flute and violoncello in A-B-A form. The A part at the end is unmodified – it is completely identical to the first part. The enclosed analytical score, therefore, only contains the first two pages, on which the reader can find the A part and the B part.

The A part has a bass ostinato in the cello, which emphasizes C by a neighbor motion, followed by a sustained C, which functions as a pedal tone. The bass ostinato consists of C-D-flat-C-C-G-E-flat-B-flat-C. After each statement of the ostinato, the note connecting to the next statement of the ostinato may be modified: a D-flat in m. 4, an E-flat in m. 6; in m. 8, the C is not sustained, but the D-flat instead, then connecting with an E-flat-D-flat-motion to the final statement of the ostinato, in which even the second C is not sustained anymore. Thus, the initial emphasis on C is weakened. The A part ends with a unison ostinato statement in both cello and flute.

The flute in part A carries the melody, which partially mimics the C-pedal tone from the cello part: in m. 3 on C, in m. 5 as well as mm. 6-7 on E-flat, then B-flat in m. 7, and in mm. 8-9 on A, which is the melodic climax. The melody itself is constructed especially with P4s and m6s/M3s – thus, interval vectors 5 and 4.² It is also those intervals that can be found in the bass ostinato: P4, M3, m6. The perfect 4ths are dominating, creating a quartal sound that becomes quite characteristic of *Duality in Time*.

While this piece is clearly contrapuntal, there are certain sonorities that seem to be structurally important intervallic relations between the two parts and that stick out aurally: Initially a P4 in measure 1, then a m7 at the beginning of mea-

² In this article, intervals are being abbreviated in terms of quality and size. For example, a perfect fourth is abbreviated as P4, a minor sixth as m6, and a major third as M3, etc.

sure 2 (please note that a m7 is an automatic byproduct of a quartal piece, as two stacked P4 create a m7 as the frame interval), then a P8 in measures 3 and 4, a M9 at the end of measure 4, a m10 at the beginning of measure 5, a P8 in measure 6, a m7 in measure 8, a M6 in measure 9, and back to a P8 in measure 10. Thus, we can observe an enlarging interval pattern – p8-M9-m10 – and then its exact mirror, reducing the interval from p8 to m7 and M6, before ending part A on a p8 (in unison motion between flute and cello, which is actually three octaves apart).

Instrumentation-wise, the composer kept both instruments purposefully apart from each other: the flute is used in its upper register, with the climax being almost at the top of its range (the high A), and the cello part is in the lower cello register, in fact on the very bottom of its register (the low C). This surely supports the contrapuntal nature and reduces harmonic dissonances. Each part has also its dynamic markings, which emphasizes the pedal tones in the cello (and its disappearance toward the end of the A part).

The syncopations make this A part very energized. Although phrase lengths are the same (at 8 beats), the melodic activities vary within each phrase. Strong accents on off-beats, such as at the end of measures 2, 8, and 10, add to the feeling of rhythmic displacement and the overall energizing in this A part.

That leaves me with one more observation about the pitch content of the A part. While the flute part alone, with the exception of the last measure of part A (which *is* the bass ostinato), is based on a C-Dorian scale, the embellishment of the C with a Db in the cello is quite dominant and makes the overall pitch content with its centering around C a C Adonai Malakh mode: C-D-flat-D-E-flat-F-G-A-B-flat-C. The Adonai Malakh mode originates in Jewish music traditions, specifically liturgical music as well as Yiddish folk music. In its liturgical use, it refers to Psalm 93, Adonai Malakh (God is King). This mode, or scale, became quite important in American song writing, which is why we may not perceive it as non-Western. But I do not know whether the composer used this scale intentionally.

While the A part is 10 measures in length, the B part is 8 measures long, consisting of four phrases of each two measures. The first two phrases have the melody in the cello; this melody is derived from the flute in measures 6 and 7 of part A, specifically interval classes 5, 5, 1, 4, 4, 7. While the beginning of this cello melody in part B emphasizes B-flat, the flute part uses the syncopated neighbor motion from the bass ostinato from part A; however, the pitch C is this time not emphasized by sustained notes, but the emphasis is on the D-flat, establishing a D-flat modality.

In the second phrase of part B, the cello melody is transposed and slightly modified in its initial measure, but is completed as an exact transposition of

its appearance in phrase 1. For phrases 3 and 4, the melody is imitated in the flute, while the cello continues with a similar-style countermelody. With “similar style”, I mean a countermelody that emphasizes the quartal-quintal melodic structure of the melody, which was, as I stated earlier, derived from part A. Rhythmic activity is decreased, and the dissonances found in the first two phrases between cello and flute are ‘replaced’ by consonances. Modal and even tonal implications eventually prevail, such as the common-practice progression iii-vi-V-I at the end of part B. (Notice also the descending P5 motion in the cello at the end of each phrase.) Overall in part B, we can observe a strengthening of the tonal emphasis on Db; this strengthening of the tonality or modality is contrary to that in part A, where we can find a relatively strong emphasis on C at the beginning, which is then weakened toward the end of part A.

The instruments continue to be in their outer registers: cello in its lower register and flute in its higher. The cello has its focal point in measure 14, while the flute leads up to its focal point at the very last note of the much more lyrical part B.

The overall pitch content of part B creates a rotated chromatic and diatonic Dorian mixed mode, which can be seen as both a contrast to, and continuation of, part A that was based on a Dorian mode with an added lowered 2nd scale degree (creating the Adonai Malakh mode). The chromatic and diatonic Dorian Mixed mode in part B is spelled F-G-flat-G-A-flat-B-flat-C-D-flat-D-E-flat-F – a Dorian mode with added chromatic notes (specifically, an added lowered 2nd scale degree and an added lowered 6th scale degree), which is commonly used in modal jazz improvisations. However, using the chromatic and diatonic Dorian mixed mode in a rotated form (more like a chromatically enriched Aeolian mode) – starting on D-flat, instead of F – allows for clear tonal implications, toward the end of part B. At least toward the end of part B, we, in fact, hear the pitch collection rather as a D-flat major scales with added lowered 2nd and lowered 5th scale degrees.

As stated earlier, the A part then returns in its original, un-altered form.

That leaves the question of what is “Duality in Time”? Certainly the contrast between the traditional rhythmic-metric emphasis in a 4/4 meter, which we can only find in the melody of the B part, and the modern, syncopated rhythmic patters that disguise the 4/4 meter. But “Duality in Time” can also refer to the historical references with the use of the ‘historical’ Adonai Malakh mode (or, if that was unconscious or unintended, the use of a Dorian mode with an added lowered 2nd scale degree) in Part A and the use of a modern chromatic and diatonic Dorian mixed mode – but rotated; or D-flat major with added lowered 2nd and lowered 5th scale degrees – in part B.

It was at this point in my analysis of this piece that I was informed about the composer’s name, so I decided to contact the composer. I originally wanted

to refrain from contacting him, as the question seemed to have been for a music scholar to analyze a piece of music that will also be performed at the conference. But then I could not resist of the desire to find more information about the piece. One of my motivations to contact him was that I learned from the composer's website that he is also a jazz musician. So, the one question I e-mailed him was: "Do you have program notes or anything that you would be willing to share about your piece *Duality in Time*?" He responded:

This is a weird little piece, because it was created under very specific and timing specific parameters.

The piece came to be on August 2, 2009 between 11 AM and 12 noon that day. A competition I was entering was organized in such a way that at 11 AM (PDT) a group of three or four potential instrumentations would be announced and then composers from all over the country would have 60 minutes to compose a piece for one of those (previously secret) instrumentations and submit the final score via email to the contest organizer (Dr. Nolan Stolz). Selected works would then receive 60 minutes of rehearsal and a premier performance later that month at a new music concert in Hartford, CT.

So, having 60 minutes to write a work - I decided to simply write a nice little ternary form - ABA - and tried to find a rhythmic, propulsive ostinato figure in the cello to propel the piece forward.

That was the gist of it, really.

The performers enjoyed playing it and asked me to elaborate on it - so I created a theme and variations setting as a prelude to *Duality* - so the final variation IS the A theme of *Duality in Time* - kind of. That piece is called *Duplicitous Encounter*. That is also on my site - so you can see what came of *Duality* when I had a bit of real time to devote to it...

Anyway, I'd be happy to elaborate further if need be and thanks again, and looking forward to the talk...

I was actually relieved that I didn't receive any detailed analytical information, because I wanted my analysis to stand alone - without information from the composer. But the described circumstance surrounding the creation of this work does add one more dimension to my analysis, specifically to my answer of what "Duality of Time" means. It also refers to the timing-specific parameters that were given as part of the composition competition - 60 minutes - as well as the time limitation of performers to rehearses - another 60 minutes.

I wish I could say that I only spent 60 minutes analyzing the piece, but I did take more time. And I thoroughly enjoyed it. And it is my recommendation that, after experiencing the life performance of *Duality in Time*, the audience would also listen to Jim Scully's 6 ½ minute piece *Duplicitous Encounter*, which is, just as *Duality in Time*, a fantastic, very enjoyable piece of music.

* * *

I found the challenge of analyzing a new piece of music for an audience that was about to listen to the performance of the piece at a conference very refreshing. My interpretation of the scales / modes used in this piece were incorrect; the composer revealed to me later that he simply thought of the Dorian mode in part A, not the Adonai Malakh mode; but in all other aspects, I was able to provide the audience with analytical observations that could guide them in the listening experience and provide additional information.

analyzed by
Lico Schüler
Texas State University

James C. Scully
Duality in Time
C-D^b-D-E^b-F-G-A-B^b-C Adonai Malakh Mode (Dorian w/ adolod b2)

The image shows a handwritten musical score for the piece "Duality in Time" by James C. Scully. The score is for Flute and Violoncello. It is divided into four systems of music. The first system is marked "A" and includes a tempo marking of quarter note = 126 and the instruction "agitato". The second system is marked "3". The third system is marked "6" and has a blue bracket above it labeled "Melody in B". The fourth system is marked "9". The score is heavily annotated with handwritten notes in blue, green, and red. These annotations include intervallic labels such as "ic5", "ic2", "ic3", "ic4", "ic5", "ic6", "ic7", "ic8", "ic9", "ic10", "ic11", "ic12", "ic13", "ic14", "ic15", "ic16", "ic17", "ic18", "ic19", "ic20", "ic21", "ic22", "ic23", "ic24", "ic25", "ic26", "ic27", "ic28", "ic29", "ic30", "ic31", "ic32", "ic33", "ic34", "ic35", "ic36", "ic37", "ic38", "ic39", "ic40", "ic41", "ic42", "ic43", "ic44", "ic45", "ic46", "ic47", "ic48", "ic49", "ic50", "ic51", "ic52", "ic53", "ic54", "ic55", "ic56", "ic57", "ic58", "ic59", "ic60". There are also circled numbers in red and green, such as "P4", "P8", "M9", "M10", "M6", "M7", "M8", "M9", "M10", "M11", "M12", "M13", "M14", "M15", "M16", "M17", "M18", "M19", "M20", "M21", "M22", "M23", "M24", "M25", "M26", "M27", "M28", "M29", "M30", "M31", "M32", "M33", "M34", "M35", "M36", "M37", "M38", "M39", "M40", "M41", "M42", "M43", "M44", "M45", "M46", "M47", "M48", "M49", "M50", "M51", "M52", "M53", "M54", "M55", "M56", "M57", "M58", "M59", "M60". The score includes dynamic markings such as "mf", "f", "fp", "mp", "ff". The piece is in 4/4 time. The key signature has one flat (Bb). The score is copyrighted © 2009.

Flute
Violoncello

Fl.
Ve.

Fl.
Ve.

Fl.
Ve.

Melody in B

Copyright © 2009

2 **B** $F-G^b-G-A^b-B^b-C-D^b-E^b-F$ Chromatic and Diatonic Dorian Mixed Mode rotated

11
Fl. p $ic1 ic0 ic5 ic4 (ic1) ic0 ic2 (ic0) ic1 ic0 ic5 ic5 ic0 ic4 ic6 ic5 (ic4) ic2 ic3 (ic2) ic1 ic2 ic4 ic6$

Vc. mf $ic5 ic5 ic1 ic4 ic4 ic5 ic6 ic1 ic5$
derived from mm. 6-8 of A

13
Fl. $ic6 ic5 ic0 ic4 (ic2) ic3 ic2 (ic4) ic5 ic4 ic2 ic3 ic2 ic3 ic6 ic5 (ic1) ic0 ic1 (ic0) ic1 ic0 ic3$

Vc. $ic5 ic3 ic2 ic3 ic5 ic5 ic4 ic1 ic5$

15
Fl. mf $ic5 ic0 ic4 ic3 ic0 ic5 ic3 ic4 ic4$

Vc. $ic5 ic0 ic4 ic3 ic0 ic5 ic3 ic4 ic4$

17
Fl. *Octave replaced* $ic0 ic5 ic4 ic3 ic5 ic0 ic5 ic3 ic4 ic4$

Vc. $D^b: iii (4) vi V I$

C
19 *agitato*
Fl. f fp

Vc. mf f mf

Summary

Duality in Time for flute and violoncello (2009) by Jim Scully is a fast-paced, contrapuntal duet for flute and violoncello in A-B-A form. Based on a bass ostinato in the cello with a memorable melody in the flute, the by-syncopations-driven A Part is in C-Dorian with a quartal harmonic feel. The B Part is dominated by a voice exchange of the melody and its quartal-quintal countermelody. Initial dissonances and the Dorian character are decreased throughout the B Part and culminate in an almost traditional iii-vi-V-I progression. *Duality in Time* uses the flute in its upper register and the cello is in its lower.