Analysis of *whole beauty now lies in memory*

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Abstract:

This thesis comprises a score for symphonic wind ensemble and solo soprano, *whole beauty now lies in memory* (2012) and an analytic text. The analytic text's introduction provides insight into the topic of reorganization and musical borrowing, upon which the work is based. Subsequent chapters discussing the following parameters are included: pitch, rhythm, form, and orchestration. Further investigations into each chapter topic relate each back to the initial concept of reorganization, and discuss the composer's methodology.

Cette thèse comprend une partition pour un ensemble à vent symphonique et une soprano, *whole beauty now lies in memory* (2012) ainsi qu'une analyse de cette ouvre. L'introduction de ce texte détaille les méthodes de la réorganisation et de l'emprunt musicaux, à partir desquelles cette œuvre a été composée. Les chapitres suivants discutent successivement des aspects de la tonalité, du rythme, de la forme et de l'orchestration. Chaque chapitre s'attache à montrer comment le concept de réorganisation est appliqué suivant l'aspect respectivement étudié et développe ainsi la méthodologie du compositeur.

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1. Introduction

1.1 Format of Work and Prefatory Comments

whole beauty now lies in memory is a work for symphonic wind ensemble (piccolo, two flutes,

oboe, four clarinets, bass clarinet, bassoon, four saxophones, two horns, two trumpets, two

trombones, tuba, harp, piano, double bass, and three percussionists) and solo soprano. It is

approximately fourteen minutes long, and is divided into five movements:

1) *At Sea*

2) *Remembrance*

3) *Coda 1*

4) *Disclosure*

5) *Coda 2*

This work came about as the result of research into and experimentation with the idea of musical

reorganization and borrowing, spurred by influences from the visual arts. Several early works

produced during the course of my Master's degree explore similar influences, such as *where

shivers won't find you*, *reorganization*, *filters*, and *swell piece*. *Whole beauty now lies in memory*

represents the culmination of this approach, refining and diversifying the ways I reorganize

music and presenting it in a larger-scale work (both in temporal scope and size of ensemble).

1.2 Thesis Format

In each chapter, I will examine one the following parameters of the work: reorganization and borrowing, form, pitch, rhythm, and orchestration. I will provide a brief overview of the significance of each parameter within the context of the work as a whole, followed by a more in-depth movement-by-movement discussion. Where practical, I will detail the ways in which one or more chapters (parameters) may be interconnected.

In the chapter on reorganization and borrowing, I will survey different approaches to the topic in various art forms, including music. Throughout the thesis, I will refer back to ideas found in this chapter, as processes influence the treatment of the work's parameters. In the chapter on form, I will outline the divisions of the work: blocks, movements, sections, and phrases. The chapter on pitch will detail the processes I used to derive the work's pitch content, mostly as related to reorganization and borrowing. The work's rhythmic texture is mostly static, and as such the chapter on rhythm will provide accounts of the exceptions and anomalies. Finally, the chapter on orchestration will discuss the relationship between the ensemble and soloist as well as the divisions of the ensemble itself.

2. Reorganization

A piece of music is comprised of a set of formal structures, pitches, rhythms, and instrumentation; the idea of transmuting one or all of these parameters into new systems, while retaining their inherent properties, opens up countless possibilities for new musical discourse. To inform my final project, I began my research by conducting a brief survey of the subject of reorganization as related to various art forms, including music.

2.1 A Brief Survey of Reorganization in Visual Art and Music

Visual artist Ursus Wehrli reorganizes well-known contemporary art pieces according to arbitrary principles, sometimes qualitative (arranging things by size and colour) and sometimes unique to the work's specific content ("cleaning up" a room in a Van Gogh painting). The result invites the viewer to clearly assess the elements of the original work, their properties in relation to each other, and perhaps even the way the original artist created the work. Visual arts curator Austin Radcliff investigates personal organization systems, posting photos of user-organized collections of objects to his blog *things organized neatly*. Both Radcliff and Wehrli acknowledge the mutability of the concept of organization.

Historically, composers from different periods have employed methods of reorganization to generate musical material and sometimes even whole pieces. Certain forms, such as theme and variations, are made up of extensive rearrangements of musical elements. In the piece *Cheap Imitation*, composer John Cage reorganizes rhythmic aspects of Satie's *Socrate* and chooses pitches using the *I-Ching*. Cage attempts to create a work so similar to the original that

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it fulfills the same function (accompanying a set choreography for a dance performance). While he does not reorganize material according to any arbitrary principles (as Wehrli does), Cage substitutes the process of consulting the *I-Ching* for an organization system.

Within the field of recent digital music composition, the program *meapsoft* automates many reorganization operations, such as arrangement of all similar pitches or events with the same amplitude. This program encouraged my original hypotheses about the potential of musical reorganization as a means of generating unforeseeable discourse. The sound examples illustrated on the software developer's website share the same qualities found in Wehrli's work, namely, that one can clearly note the proportions and characteristics of the original work but in a very different way. In my thesis, I recreate similar operations using analogue processes, and use the results to inform content and syntax.

2.2 Initial Steps

Initially I conducted experiments reorganizing Schoenberg's op.19 mvt. V and Purcell's *If Music Be the Food of Love*. The resultant music was structurally balanced, showing clear thematic development, but in my opinion lacked enough surface-level detail to hold a listener's attention. When I began to think of the reorganized material as a background structure, to be built upon or added to, its utility became clear. I began by creating a text-based score encouraging performers to reorganize music in a variety of pre-defined ways. This intermediary step helped me to articulate the numerous ways in which music can be reorganized, as well as to release the process to other musicians and allow them to begin their own explorations.

Ultimately I developed a hybrid approach: first, reorganizing music based on one of a number of

parameters, forming a background structure; and second, drawing secondary materials from the same source and embellishing, extrapolating, and superimposing them onto the primary structure. I chose selections from Charles Ives' *119 Songs* as source material because of their brevity, harmonic richness, and English-language text. In my final work I applied this hybridized approach to numerous musical parameters, and moulded the results into five distinct movements.

3. Form

3.1 Structure of the Work as a Whole:

The work is divided into five short movements: *At Sea, Remembrance, Coda 1, Disclosure* and *Coda 2.* The three titled movements (named after the Charles Ives songs from which they draw their source material) carry the work's most important gestures, while the two codas act as repositories for leftover material. In a sense, the codas provide contextual information for material found in other movements.

The two codas serve to re-divide the work into two large blocks. The first, made up of *At Sea, Remembrance,* and *Coda 1*, is approximately seven-and-a-half minutes long. The second, made up of *Disclosure* and *Coda 2* is approximately six minutes long. While none of the movements have breaks in between, these two blocks remain distinct due to their highly different characters and compositional methods.

In this chapter, I will discuss each movement's formal proportion, important gestures, and contribution to the work's integrity. All descriptions correspond with the diagram found at the end of the chapter.

3.2 Form of Individual Movements

At Sea:

The first movement functions as an introduction, and is divided into three parts: an instrumental introduction, an exposition featuring the solo voice, and a short instrumental recapitulation. Two important repeated gestures occur: the first, a soloistic piano gesture that descends into the lowest register, mirrored at the end of the movement; the second, the sharp crescendo in the saxophones in m. 9, mirrored by the whole ensemble at the end of the movement, leading directly into *Remembrance*.

Remembrance:

The form of this movement comprises four short strophes, sung by the voice, with two instrumental interludes of increasing duration. The short crescendo gesture from *At Sea* (m. 9) develops through repetition, and a new motive -- a repetitive rhythmic figure -- emerges (m. 10). This movement melts into the *Coda 1* by way of an eliding final cadence.

Coda 1:

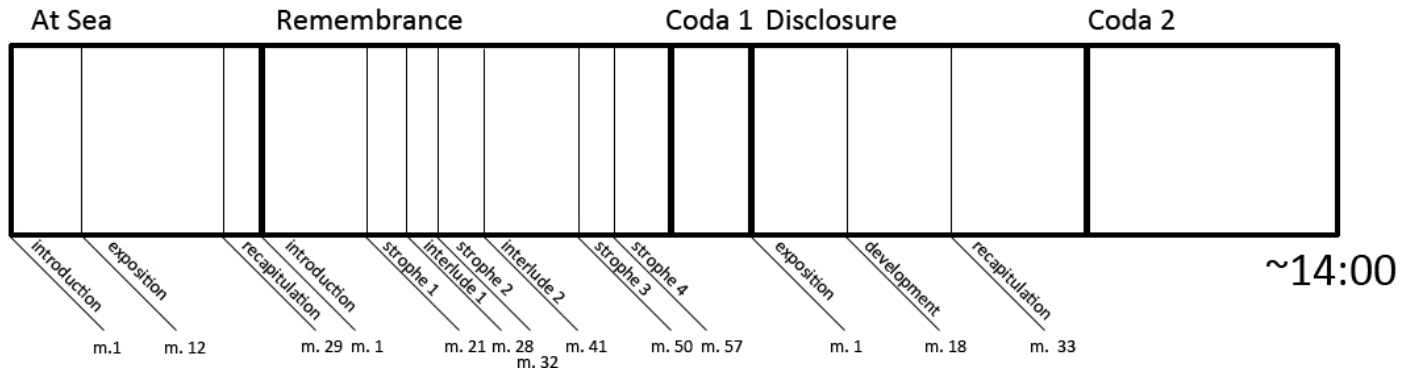The first coda begins with the previous movement's final cadence, which is repeated four times. With each repetition it loses certain fundamental characteristics, such as pitch, timbre, and rhythm, eventually becoming unidentifiable. This movement concludes with air sounds in the flutes, which both mimics the sound of the glass jar scraping on the piano string as it becomes silent and foreshadows the pitchless final movement.

Disclosure:

Disclosure represents a new beginning, introducing more complex textures and motivic development than the first three movements of the work. Despite these differences in the movement's character, it bears structural similarity to *At Sea*, dividing into three parts: an exposition, a development, and a recapitulation. The exposition presents short fragments drawn from the vocal part of the original Ives songs and loops them repeatedly. During the development the loops accelerate and culminate in a final restatement of the crescendo motive developed in *Remembrance*. The recapitulation presents the short fragments again in a new order, ultimately ending with an echo of the first movement's ending gesture (then originally in the harp and piano): now, an ascent into the highest register of the piccolos.

Coda 2:

The second coda is perhaps the work's most striking movement. It is short, anomalous, and occurs as a surprise, containing the only spoken and unpitched material in the piece. In contrast with other movements, it is also relatively fast, and remains in one tempo throughout. The text content of the movement consists of all the consonants from the Ives song *Disclosure*, none of which were used in the corresponding movement of the entire work. Initially the consonants occur in the same order as the original song, but over the course of the movement are reorganized into groups of the same consonant in a process lasting approximately two minutes.

At Sea   Remembrance   Coda 1 Disclosure   Coda 2

introduction exposition   recapitulation introduction strophe 1 interlude 1 strophe 2 interlude 2 strophe 3 strophe 4   exposition development recapitulation

m.1   m. 12   m. 29 m. 1   m. 21 m. 28   m. 41   m. 50 m. 57   m. 1   m. 18   m. 33

m. 32

~14:00

Example 3.1: diagram of form and internal divisions (approximately to scale)

4. Pitch

The work's pitch material derives in one of three ways: reorganization, borrowing, and the formation of pitch complements.

4.1 Reorganization:

In movement 1 and 2, *At Sea* and *Remembrance*, the vocal line is the predominant musical element, containing music reorganized by pitch class. Beginning with the first note of the original Ives song, all subsequent iterations of the same pitch class are extracted (retaining their original rhythmic values) and arranged in order of occurrence. This process continues until each of the remaining pitch classes in the original vocal line has been exhausted. Short rests are inserted to allow the vocalist to breathe.

Example 4.1: a) vocal line from original Ives song "At Sea

b) reorganization by pitch class

In *Disclosure*, there are two sections containing reorganized material. In the first, material is extracted from the original Ives song based on the order of appearance of vowels. Beginning with the first vowel, all subsequent iterations of the same vowel are extracted (retaining their original rhythmic values and itinerant voiced consonants) and arranged in order of occurrence, forming short melodic phrases. In the second, these short melodic phrases are themselves reordered so that the groups of vowels progress from darkest to brightest; a reorganization of a reorganization.

4.2 Borrowing

Remembrance uses pitches borrowed from melodic and harmonic material from the original Ives songs: in m. 1 (Nickel), the harp chord is a verticalization of the second arpeggio (Ives), comprised of the pitch classes C E G B; in measures 10, 15, and 18 (Nickel) the chords are taken from the last two measures (Ives); and m. 19 (Nickel) is a verticalization of the first arpeggio, returning to the beginning of the song (Ives). These five borrowed chords form an important cycle that repeats twice in the harp part, and they also furnish freely linear material throughout the movement, beginning in the piano in m. 21 and continuing in the wind instruments at m. 41.

Disclosure uses the harmony of the original song in a reordering that follows the arbitrary reordering of text (as explained earlier), retaining the music's tonal surface divorced from its original syntax.

4.3 Complement / Partial Complement

Complementation

The main example of complementary harmony exists between the end of *At Sea* and the beginning of *Remembrance*. As seen in the diagram below, the soprano line of *At Sea* contains ten pitch classes. I use the remaining two pitch classes, the complement, to harmonize the line for the duration of the movement. In addition, the ensemble sustains six pitches from the vocal part not present in the first chord of the following movement, forming an eight note chord at the end (as seen in example 3.2 c). Thus, *Remembrance* begins with the four note complement.
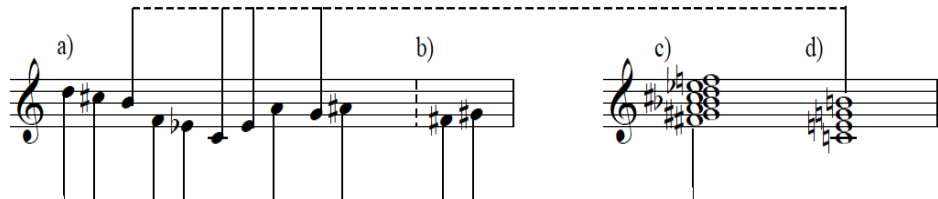
Example 3.2

a) vocal line of At Sea

b) complement

c) At Sea *m. 34*

d) Remembrance *m. 1*

Partial Complementation

This technique involves deriving complements to two unique sets of pitch classes, and then selecting only those notes common to both complements, a partial complement, for use in intermediary chords or musical lines. This technique allows the composer to link two events with complementary material while avoiding a complete saturation of twelve-note chromaticism. The primary example of this occurs in the woodwind swells in the beginning of *Remembrance*.

As illustrated in diagram 3.3, *Remembrance* begins with a four note chord. The first climactic --

the next chord -- appears at m. 10, and comprises six pitch classes. The partial complement

between these two chords contains only three pitch classes. I use this three note partial

complement in m. 9, supplemented with pitch material from the first chord, as linear material to

produce a dynamic swell up to the first climax.

Example 4.3: partial complementation in Remembrance

5. Rhythm

Most of the work's movements share a similar tempo, falling in the range of quarter note equals 40 to quarter note equals 72. In general, the work's rhythmic texture may be perceived as static, with short moments where microrhythmic material or pulses gain in intensity. In this chapter I will proceed to discuss each movement's notable rhythmic gestures and characteristics.

At Sea

This movement's rhythmic activity can be divided into three different sections, corresponding with the sections outlined in the chapter on form. The introduction divides into two parts: the first, a series of repeated rhythmic figures that eventually accelerate both microrhythmically and in tempo; and the second, a series of low, irregular pulsations (m. 9). The exposition, beginning at m. 12, presents a monorhythmic texture (only one layer is rhythmically active), with the rhythm in the solo soprano provided by the reorganization of the Ives song. The recapitulation contains another microrhythmic and tempo accelerando to mirror the first, propelling the movement into *Remembrance*.

Remembrance

This movement contains some of the work's most developed rhythmic material and introduces a feeling of pulsation in its latter part. The introduction is made up of three accelerated phrases (each a combination of microrhythmic and tempo accelerandi). From the first phrase, a vibraphone rhythmic figure, emerges from the ensemble's loud chord (m. 10), becoming audible only as the rest of the ensemble dies away. The skeleton of its rhythmic pattern consists of a cycle of subdivisions of the beat: 3, 5, 7, and eventually 8. Embedded in this cycle is an accelerating pattern of two attacks separated by five rests of the same microrhythmic value.

example 5.1, *Remembrance* vibraphone m. 10-14

After the introduction, the voice enters and begins the strophic sections defined in the form chapter.These vocal sections, in which the soprano is the focal element, are governed by the rhythm from the original Ives songs punctuated by brief irregular pointillistic figures and interruptions.

In m. 28 two vibraphones perform the same cycle as previously described, continuing the pulsation pattern, increasing the number of subdivisions from two to eight. The number of rests between each pair of attacks diminishes from five to two. Overall, the effect of acceleration becomes increasingly prominent. The vibraphones also begin to play overlapped parts of the cycle with hairpin dynamics.

This cyclical rhythmic idea is taken up by the wind instruments at m. 39, once again extended, and with a more extensive use of overlapping and dynamic modulation. The climax is marked by tempo accelerando, crescendo, and then a sharp dispersal of all rhythm and a return to stasis.

Coda 1

The rhythmic activity consists of four chords of equal duration, each separated by two measures of rest. The low density of rhythmic activity contributes to the feeling of timbral suspense.

Disclosure

Like *Remembrance*, this movement is comprised of three sections. The first contains three layers of rhythmic activity: the first, the vocal line with rhythms extracted from the original Ives song (as explained in the Pitch chapter); the second, accompanimental *staccato* chords in the winds, brass, harp, and double bass that either double or syncopate with the vocal rhythm; the third, contrasting rhythmic loops in the piano and two vibraphones (based on fragments of the vocalist's rhythm). Each phrase the vocalist sings is doubled in either the piano or vibraphone, and continues to repeat until m. 18.

The second section, the development, begins at m. 18. The rhythmic loops are taken over by wind instruments. Initially legato, they gradually lose their sustained quality in m. 22. At m. 26, the rhythmic texture becomes stratified. The brass, piano, and percussion instruments follow the conductor, while the woodwinds become aleatoric. Both groups accelerate and crescendo into a grand pause leading into the recapitulation.

The recapitulation begins with a texture containing three rhythmic layers: The first, the vocal part, in which the fragments presented in the exposition are reordered but retain their original rhythmic values; the second, an accumulation of the looped fragments from the exposition, played by the right hand of the piano; and the third, long, sustained notes played by the left hand of the piano and doubled with gongs whose sequence of attacks outlines a microrhythmic accelerando. The recapitulation section concludes with an arhythmic section consisting of triangles and a long, drawn out suspended cymbal roll leading directly into the final movement.

Coda 2

Coda 2 contains the only extended consistent rhythmic pulse, made up of of numerous strophes of a repeated sixteenth note pattern. Though the sixteenth notes repeat almost without break for the duration of the movement, small variations in dynamics create constantly shifting accents.

6. Orchestration

6.1 Instrumentation:

The work is scored for wind ensemble and solo soprano. The instrumental roles in the work take a background role, and may be divided into three tiers based on level of activity: the first, piano, harp, percussion, and double bass; the second, wind instruments; and the third, brass instruments. In most wind ensemble repertoire, heavily-doubled wind and brass instruments carry material of primary importance, while percussion and auxiliary instruments form the background. In *Whole Beauty Now Lies in Memory,* I aimed to create a work with textural weighting akin to a chamber orchestra.

6.2 Disposition of Ensemble and Soloist:

The ensemble and soloist retain discrete roles throughout *At Sea, Remembrance, and Disclosure*. In both coda movements, the ensemble and soprano fuse -- whether in silence, as in *coda 1*, or shared vocalization, as in *coda 2*.

The traditional dramatic juxtaposition of soloist and ensemble is reimagined by the soprano's unorthodox physical placement within the ensemble. The soprano is not expected to dramatize her part, instead functioning almost as a pre-recorded element (should she be amplified) or as an auxiliary instrument.

There are moments during the piece where the soprano rests and the ensemble takes a more prominent role. These moments, such as the introduction of *At Sea*, interjections in

Remembrance, and middle part of *Disclosure* serve as important moments of relief in which the ensemble exploits a wider dynamic range and greater degree of activity.

6.3 Register:

Most of the piece occupies the middle register. The use of the bass register adheres to one of two functions: either for punctuation or as a foundation for harmony. Punctuated bass notes are those imported from the original Ives songs, such as the triadic bass notes in *Disclosure*. They are short in duration, minimal in volume, and do not provide a ground for the harmony. Functional bass notes are generally complementary to pitch collections in the middle register, such as the four bass notes used in *Remembrance.* These pitches last longer, are louder, and are focal in their importance to the harmony of the movement.

One notable exception occurs in the introduction of the piece, when the piano descends down to the bass register. This short section of four measures uses all the bass notes of all three Ives songs below G3, after subtracting the bass pitches used in later movements. This set of measures serves two purposes. The first is to counter the heavy weighting of the middle register. The second is to form a loose registral association with the end of the *Discolsure*, which ascends into the highest register of the piccolos.

The high register is used to highlight climactic points in the work. After the descent to the low register, the ascent to the high register at the end of *At Sea* serves as a balance, and climax to the movement which gives way to the next. This gesture is echoed in *Remembrance*, and eventually in the large ascent at the end of *Disclosure*.

7. Conclusion

The previous chapters provide an overview of the salient details of my thesis work *whole beauty now lies in memory*. While I believe much of the work was a success, there are a few aspects that warrant further investigation and improvement.

The first change might occur in the nomenclature of movements three and five. *Coda I*, while extending cadential material, functions more as an *intermezzo* than a coda. Rather than ending the first block of the work, it links the two blocks together. *Coda 2* does not extend anything from previous movements, cadential or otherwise, but functions instead as a repository for unused material. In this way, it can be seen as an *appendix.* A change in nomenclature might elucidate both codas' functions more accurately to both performers and audience members.

The second improvement could be to fortify the relation between *Coda 1* and *Coda 2*. I believe that this would strengthen the work in three key ways: first, it would balance the work's tempo structure by creating two blocks with similar characteristics; second, it would propel the work forward between *Remembrance* and *Disclosure* rather than stopping it completely (matching the characteristics and flow of the other transitions of the piece; and third, it would prepare the listener for the type of rhythmic motion and timbre that occurs in *Coda 2*. I would make this improvement by bringing a small amount of unpitched rhythmic material into the woodwind parts, and extending the length of *Coda 1*.

The most elusive question remaining about the work lies in the notation of the vocal part. Neutrality of vocal part was directly related to my idea of reorganizing material, and therefore

nullifying other expressive details. Perhaps in the future I want to revisit the question of whether or not this produces a satisfactory musical result. Currently, the vocal part does not contain dynamics, phrasing, or other types of instruction. In order to achieve the specific rhythmically detached character, I believe it would be worth investigating the notation of the voice part with particular attention to the cutoffs of each note. The addition of rests, accents, and further expression markings may lead to a more accurate performance.

In future research, I anticipate further work involving borrowing material from other sources. A recent realization and performance by Sarah Albu of my text-score *reorganization* at the Cluster Festival in Winnipeg, Manitoba on March 9, 2013 involved a reorganization of a Bikini Kill song. I was taken aback at the reorganization's musical richness and surface-level interest. Contrary to my own findings, the work had more content than a background structure, standing up as an autonomous musical thought. I would like to explore reorganizing more non-classical music with a variety of parameters to see if I can attain similar results, and ultimately compile my findings into a set of notated works for various instrumental configurations.

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