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by

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**The Ninth Wave
for chamber orchestra and electronics**

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The Ninth Wave
for chamber orchestra and electronics

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Abstract

The Ninth Wave for chamber orchestra and electronics

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The Ninth Wave is a work for chamber orchestra, fixed electronics, and live-processed brass. The piece was inspired by the work of Chinese “explosion” artist, Cai Guo-Qiang. In his art, Cai often tackles environmental issues in very provocative ways. Given the current ecological disputes plaguing our world and our political landscape, I wanted to compose a work reacting to these issues in a striking way. In this piece, the brass is staged antiphonally above the orchestra, placing them in a position of power; they, combined with machine-like electronics, represent mankind’s intrusion into the natural world. The strings and woodwinds represent nature. As with Cai Guo-Qiang’s art exhibition by the same name, *The Ninth Wave* aims to draw greater attention toward our destruction of the planet through a compelling drama.

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Chapter 1: Background Information

The following chapter provides background information on the artist who inspired this piece, Cai Guo-Qiang. His seminal art exhibition, *The Ninth Wave*, contains three works which have provided substantial impetus for my music: *The Ninth Wave* (Cai Guo-Qiang's ship installation); *Impression of The Ninth Wave* (which utilizes gunpowder on paper); and his so-called "explosion event," *Elegy* (which is a fireworks display using edible food powders in broad daylight). During this chapter, I will enumerate the ways in which I have responded to these sources of inspiration to create a musical drama about mankind's destruction of nature. Additionally, I have detailed information about other sources of inspiration for the work including the photography of Edward Burtynsky. Finally, I have included information about the musical works which I have modeled, the aesthetic goals for the piece, and my process for composing this work.

1.1 Introduction and Primary Influences

The Ninth Wave is a work for chamber orchestra, fixed electronics, and live-processed brass. It was inspired by the artwork and aesthetic of visionary Chinese artist Cai Guo-Qiang—who is perhaps best known for his fireworks display at the 2008 Beijing Olympics. The son of a calligrapher in the Fujian Province, Cai Guo-Qiang was exposed to Chinese traditional art from an early age through his father, Cai Ruiqin. Having gained his own proclivity for creating art, himself, Cai began to pursue his own pathways toward new expressivity in the early- to mid-1980s. During this time Cai started experimenting with gunpowder in his drawings, and later, he began to create his signature “explosion events”—fireworks displays using edible food powder to “paint” the sky in broad daylight. When asked about his decision to use gunpowder, Cai Guo-Qiang explains that he had seen gunpowder used “in both good ways and bad, in destruction and reconstruction”—referring to his experience growing up during the Chinese Cultural Revolution of the 1960s and 70s.¹ Cai Guo-Qiang’s artwork would challenge observers to think more deeply about the world issues surrounding them.

One of his most powerful recent exhibitions, entitled *The Ninth Wave* (2014), harkens back to the seminal work (of the same name) by Russian-Armenian marine painter, Ivan Aivazovsky (1850). The title refers to an old sailing expression that describes a wave of incredible size that comes after a succession of incrementally larger waves.² In the original painting (Figure 1), a group of people are desperately clinging to the wreckage of a ship’s debris after having miraculously survived a shipwreck³:

¹ Dana Friis-Hansen, Octavio Zaya, Takashi Serizawa, Qiao Liang, and Wang Xianhui, *Cai Guo-Qiang* (London: Phaidon Press, 2002).

² Rosemary Pennington, “Debating Globalization and The Ninth Wave,” *Framing the Global*, January 5, 2015, accessed February 2, 2018, <http://framing.indiana.edu/2015/01/05/debating-globalization-ninth-wave/>.

³ Ivan Aivazovsky, *The Ninth Wave*, Google Arts and Culture, accessed on January 28, 2018, <https://artsandculture.google.com/asset/the-ninth-wave/jgHuL-7yxgrOSw>.

Figure 1 – *The Ninth Wave* (1850), located at the State Russian Museum, St. Petersburg.



Some might interpret Aivazovsky's work from a Judeo-Christian perspective: nature's (God's) destruction of mankind. However, it is evident when viewing Cai Guo-Qiang's collection that he held an altogether different interpretation of Aivazovsky's painting. Cai's centerpiece work for the exhibition, an installation work also entitled *The Ninth Wave*, utilizes a fisherman's vessel from his home city, Quanzhou, filled with animal replicas. When I viewed this work for the first time, I instantly thought of the biblical story of Noah and the ark, but I also noted the expressions of helplessness on the animals' faces. In Figure 2, you can see the animals clinging precariously to the ship whose mast bears a tattered white flag indicating a surrender⁴:

⁴ Cai Guo-Qiang, *The Ninth Wave*, 2014, The Power Station of Art, Shanghai, accessed January 28, 2018, http://www.caiguoqiang.com/sites/default/files/styles/large/public/2014_TheNinthWave_A3876_FYZ_Installation_003.jpg?itok=4DJnO4o-.

Figure 2 — Installation view of *The Ninth Wave* in the Great Hall of the Power Station of Art, Shanghai, 2014. Photo by Zhang Feiyu. Used with the courtesy of Cai Studio.



When considering Cai's art, I am confronted with an altogether different scenario than the Old Testament's flood narrative. I believe it is an allegory for global warming. Additionally, one of the greatest issues China faces currently is its rampant pollution problem, and Cai Guo-Qiang's art installations are often heavily influenced by their locations. (*The Ninth Wave* installation was premiered in Shanghai.) Following in this line of thinking, I believe that Cai's works contain a narrative of destruction of nature by man, and I have applied such a narrative to my own musical interpretation.

Another work from Cai Guo-Qiang's exhibition which particularly affected the trajectory of my piece is *Impression of The Ninth Wave*. In this work, he utilizes gunpowder on paper to create his own rendition of Aivazovsky's painting through strategically planned explosions.⁵ His version has a gritty eeriness that makes the scene look far more ominous than Aivazovsky's painting. The textural graininess of the gunpowder, seen in Figure 3, gave me impetus for my electronic sound design and for the exploratory nature of my wind and string orchestration⁶:

**Figure 3 – *Impression of The Ninth Wave*, gunpowder on paper, 2014.
Photo by Zhang Feiyu. Used with the courtesy of Cai Studio.**



⁵ Cai Guo-Qiang, *Impression of The Ninth Wave*, 2014, Cai Studio, New York, NY, accessed January 28, 2018, <http://www.caiguoqueiang.com/projects/impression-ninth-wave>.

⁶ Ibid.

When I first saw this work, I was drawn to the overall darkness in tone. Somehow, the silhouetted figures on the wreckage reminded me more of the poor animals from Cai's ship installation than the humans in Aivazovsky's painting. This ambiguity combined with the work's darkened color palette further heighten my belief that Cai Guo-Qiang was attempting to make a broader statement about our destruction of nature and, ultimately, ourselves.

One final piece from the installation greatly inspired my work: *Elegy: Explosion Event for the Opening of Cai Guo-Qiang: The Ninth Wave*. Like his other daytime "explosion events," *Elegy* utilizes edible food powders to paint the sky through coordinated detonations which are often timed down to the millisecond with proprietary computer software. These are literal fireworks displays which utilize materials that can be easily seen in the daylight. I was particularly interested in the temporal aspect of this art medium and how the software serves as a sort of "score and conductor" for the explosions. I found this explosion event to be quite arresting and moving at times—the visceral nature of flowers exploding into existence and then simply disintegrating into dust is a haunting image (Figure 4)⁷:

⁷ Cai Guo-Qiang, *Remembrance*, chapter two of *Elegy: Explosion Event for the Opening of Cai Guo-Qiang: The Ninth Wave*, 2014, The Power Station of Art, Shanghai, accessed January 28, 2018, <https://caiguoqiang.wordpress.com/2014/08/21/cai-guo-qiang-the-ninth-wave-opens-in-shanghai/>.

Figure 4 – *Remembrance*, chapter two of *Elegy: Explosion Event for the Opening of Cai Guo-Qiang: The Ninth Wave*, realized on the riverfront of the Power Station of Art, 5:00 p.m., approximately 8 minutes. Photo by JJY Photo. Used with the courtesy of Cai Studio.



The explosion event is broken into three parts: *Elegy*, *Remembrance*, and *Consolation*. *Elegy* takes a difficult look at mankind's destruction of nature. *Remembrance* peers back to the idyllic scenes that existed prior to our inhabitation. Finally, *Consolation* offers a glimpse of hope for a potentially better future. This three-part form influenced my organizational approach in my own work, though I did revise the ordering. I placed the darkest moment in the middle to break up the brighter first and third sections to give the work a different dramatic narrative: light into darkness and a return, somewhat, toward the light.

Each of these works from Cai Guo-Qiang's *Ninth Wave* installation has been influential in providing impetus for my piece; however, the resultant work is my own personal reaction to important environmental issues plaguing our world. This is certainly

a work written to acknowledge the time and political atmosphere in which it was conceived. Also, it is well worth mentioning several other people and events that have personally compelled me to write a work about the destruction of nature. The following section will concentrate on these influences and their subsequent effect on the work.

1.2 Other Influences

Perhaps the most emblematic representation of my piece, aside from the art work which inspired it, is the work of Canadian photographer, Edward Burtynsky. Figure 5 shows the striking dichotomy of a scenic tree line and a silver oil pipeline⁸:

Figure 5 – *Oil Fields #28, Cold Lake, Alberta, Canada 2001*. Photographed by Edward Burtynsky. Used with the courtesy of the artist.



I cannot help the turning of my stomach when I look at such images. Oil is both a necessity for everyday life and a threat to our existence. Perhaps Burtynsky said it best in the following: “[we] come from nature...There is an importance to [having] a certain reverence for what nature is because we are connected to it... If we destroy nature, we destroy ourselves.”⁹ In my work the brass and electronics represent the unnatural

⁸ Edward Burtynsky, *Oil*, 2001, Alberta, Canada, accessed January 28, 2018, <http://archive.photogaspesie.ca/en/portfolio-item/edward-burtynsky-a-gaspe/>.

⁹ Edward Burtynsky, Edward Burtynsky’s Photography Website, accessed February 2, 2018, <https://www.edwardburtynsky.com/>.

intrusion of mankind into nature; Burtynsky's photograph perfectly exemplifies such an invasion.

Additionally, I have stumbled across several other striking examples in my research which demonstrate how our negligence as a species is impacting the world's various ecosystems. When perusing the internet last winter, I found an extremely poignant video of a polar bear starving. Weak from lack of food, with no energy, the bear drags its back legs because the muscles have simply atrophied. It is enduring a slow and painful death, and it warns us of the coming extinction of its species within the next 100 years.¹⁰ When seeing such images and hearing the news of politicians fighting against environmental protection, I feel compelled to make a counterstatement.

Finally, I have personally witnessed a moment of environmental devastation which has stuck with me to this day. In the summer of 2010, when driving back to Austin from my home in Georgia, I took a small vacation to see the coastline in Mississippi. I wanted to spend a day at the beach, unwinding and relaxing, but instead, I was confronted with an altogether different situation. After arriving at the beach, I noticed there was a nauseating stench in the air. I walked to the water line to see if I could find the cause, and to my surprise, there were hundreds if not thousands of dead fish floating in the water. It was one of the most macabre scenes I have ever witnessed. Thinking through the possible causes of the event, I remembered the infamous BP Gulf oil spill which had only recently occurred in April. I asked a local shop owner if this had caused all of the fish to die; he confirmed. I was devastated to think that we had caused this. We brought this devastation to such a widespread area so that we could have gasoline. I was ashamed to drive my car all the way back to Texas, knowing that I was contributing to the problem.

¹⁰ Paul Nicklen, Instagram, December 5, 2017, accessed December 12, 2017, <https://www.instagram.com/p/BcU-6PsAoIp/?hl=en>.

This dissertation exists to bring greater and more thoughtful awareness to the environmental issues tormenting our planet. I elected not to include text narration in my work but, instead, to let the musical narrative speak for itself. The specifics of that narrative will be explored in more detail in the second chapter, but in order to plan this narrative and accomplish my artistic goals, I examined several other salient works which exhibit their own creative approach to narrative and form. Additionally, I looked at works which had an altogether unique approach to orchestration and notation, because I wanted this piece to utilize several experimental techniques in the same spirit of Cai Guo-Qiang's gunpowder art.

1.3 Musical Works Studied

I have studied and listened to an innumerable amount of music while writing and planning *The Ninth Wave*, but I would like to discuss the most important pieces which have shaped the outcome of my work in a distinct way. Perhaps the most pivotal piece with regard to form would be *Try* (2011), by Andrew Norman. In this work, Norman creates a cyclic unfolding of materials by continually circling back through a hodgepodge of various ideas, all with their own distinctive motivic, thematic, textural, and/or timbral thumbprints. Using the indication “madcap fast,” he moves quickly between these ideas at breakneck speed, cycling back onto the previous ones to provide the necessary repetition and context. During these backward cycles, he varies each of the musical materials to give a constant sense of organic growth. Each of the materials Norman chose to use has a “gestalt” element that makes it instantly recognizable when it appears during the cyclic repetitions. This approach of attaching a memorable sonic thumbprint to every musical element figured strongly into my own methods for writing the middle portion of my work. I am fascinated with the notion of taking materials that seem diametrically opposed and making them work together in a larger structure. One could of course attribute this approach of rapid juxtaposition to Stravinsky, as well; *The Rite of Spring* certainly makes extensive use of juxtaposing musical block structures. For me, however, I drew upon Norman’s work due to the incredibly rapid pace at which ideas are introduced and developed. In chapter two, I will cover the specifics of how I constructed the form of this section of my work.

Andrew Norman’s *Try* also greatly influenced the emotional narrative of my work. In his piece, the piano plays an important dramatic role which is not fully understood until the end. During the opening measure, the piano attempts to creak out a few notes but is quickly interrupted by a barrage of other musical ideas, each seeming to

have a more pompous and outspoken quality than that of the meek piano. The listener must wait until letter GG (over 400 measures into the work) for the piano to be able to “try” to find the proper notes to play. Norman describes this important element in the following: “at long last, after ten minutes of increasingly frantic trying, it [the piano] finds one small, unlikely bit of musical material it likes enough to repeat and polish and hone until it finally (fingers crossed) gets it right.”¹¹ It is clear when listening to the piece that there is a sentimental idea at play. One feels a sadness, or even relief, when the piano is finally able to make itself heard. I utilized this type of dramatic juxtaposition in my own work through the violin. The strings and woodwinds play a role of meekness in my piece (representing the natural world), and the free, rhapsodic nature of the violin in particular stands opposed to the brass’s motoric imposition in the middle of the work. The relief I felt in Norman’s piece was the same type of catharsis I sought to provide in mine. Many other more serious works come to mind which use this type of emotional trajectory (catharsis following a great struggle): Christopher Rouse’s *Flute Concerto* and *Trombone Concerto*, John Corigliano’s *2nd Symphony*, Mahler’s symphonic works, among many others.

With regard to orchestration and notation, I digested the works of Jacob Druckman and Corigliano in particular. Having always greatly admired Druckman’s attention to detail in his orchestration, I revisited several of my favorite scores to find impetus: *Lamia*, *Prism* (primarily movement 2, “after Francesco Cavalli”), *Windows*, and *Nor Spell Nor Charm*. The non-standard notational practices in these scores gave me several ideas about how to approach the aleatoric passages of my own work. Additionally, the works of John Corigliano have been extraordinarily helpful for finding

¹¹ Andrew Norman, Andrew Norman’s Composition Website, accessed February 20, 2018, <http://andrewnormanmusic.com/archives/196>.

new methods of aleatoric notation which the players will find easy to understand. He seems to have struck a balance in his works in terms of how much control to give the performers and conductor. In chapter two, I will enumerate the particular methods and approaches which I incorporated into my own thinking.

1.4 Artistic Goals

During the course of planning this large-scale work, I established several aesthetic goals for the piece, given where I stand in my own compositional development. First, I wanted to write an extended single-movement work. The longest piece that I had written without pause prior to this work was about nine and a half minutes long. With this piece I wanted to plan a large-scale form that would create a great conflict followed by a long, cathartic resolution, something which I had always admired in the great symphonists. The key to the success of the form would be to provide continual interest and variation. I was careful to think about when to introduce the brass and electronics in the work and when I should allow them to return to interrupt and change the music of the stage orchestra in a dramatic way. This piece has been the greatest challenge I have faced, with regard to how to construct the form, and it has provided me with an excellent opportunity to push my craft to a new level. The final version of the work lasts for over fifteen minutes, far surpassing the length my previous works.

Next, I wanted to write a piece with the artist's approach in mind. Cai Guo-Qiang's explosion events caught my attention from the first time I watched his documentary entitled *Sky Ladder*. After seeing the visceral power of these installations, I was determined to represent it, musically. I wanted to write music with the same experimental intent and push myself to explore the instruments in ways that I had not in the past. It has been a personal goal of mine during my doctoral studies to experiment more with instrumental writing and extended techniques. In fact, *The Ninth Wave* is not my first work to do this; I wrote another work three years ago based on the art of southern folk artist, Howard Finster. In that work I utilized orchestration indicative of Finster's technique in which he shatters old mirrors and glass to place them into trash mosaics. With my dissertation, I wanted to capture the graininess and explosiveness of Cai's

gunpowder art. In chapter two, I will detail all of the ways in which I utilized extended techniques to accomplish this.

Finally, it was my supreme goal to compose a work with emotional agency and a compelling programmatic narrative which could help to move people toward a change in thoughts or actions. In order for my work to have the intended effect, I needed to carefully construct a narrative in which the beauty and purity of nature is overtaken by an ominous force. Several inspirational works come to mind including the concerti of Christopher Rouse. In these works, Rouse often pits the solo instruments against the orchestra, and he gives them a naivety and innocence which is then ruptured or destroyed. I wanted to give the stage winds and strings, primarily the violin, a similar role in my work, where they would react and change dynamically to the interjections of the brass and electronics. Lastly, I wanted to have a moment of repose following the climax where the timid violin and stage instruments return to finally work in some cohesion with the brass, providing the necessary catharsis for the ending. Symbolically, this could represent hope for a change in which nature and mankind could coexist, peacefully.

1.5 Composition Process

To write *The Ninth Wave*, I utilized several techniques which I have been honing over the past few years. I have grown fond of using DAWs¹² for the purpose of creating musical content and even for writing entire pieces. My recent experiences writing electronic works in Logic and Reaper have made me quite a bit more facile with these types of software, and I have also begun writing acoustic works in them as well. This method of composition, like any other, does present several advantages and disadvantages.

First, I am able to do simple tasks very quickly in DAWs, and I view this type of software like a sort of “digital paper.” It frees me to write ideas without the constrictions of bar lines; additionally, later in my process, I return to what I wrote to make notational decisions about rhythm and meter. Also, I can revise what I wrote if necessary to make it fit a particular framework. DAWs provide an invaluable resource for visualizing the possibilities of aleatoric passages including feathered-beam tuplets, and I can test-drive several methods of notating tricky passages. Additionally, I believe it has improved the pacing of my works. Finale’s playback often causes me to develop ideas too quickly due to the lifeless nature of the sound. Using state-of-the-art sample libraries, however, I am able to hear and respond to the music more like a living, breathing organism. Sample libraries have helped me make each musical phrase more lucid, and they have caused me to branch out into foreign territory with notation and extended techniques. The IRCAM Solo Instruments library and the EastWest orchestral libraries have figured strongly into my orchestration. These are irreplaceable tools which have given me more inspiration and even more courage to write with a greater expressive range for the instruments.

¹² Digital Audio Workstations.

On the other hand, DAWs can create numerous headaches during the compositional process. For one, I had to decide how best to handle each situation when composing aleatoric passages. The freedom that I had displayed in coming up with the ideas worked against me in some cases. There were particular passages of this work that were nightmarish to notate, particularly the feathered-beam tuplet passages throughout the first half of the work; however, I believe that the negotiations that took place to make the rhythms fit properly in the final stages ultimately made the piece richer and more artistic. Though notating the rhythms in this manner presented several challenges, the process also revealed several subliminal relationships between sections in terms of meter. The metric modulations I created most likely would not have occurred had I been notating the work in Finale or even on paper. Hence, I must acknowledge the influence of Reaper and the sample libraries on my overall process, and I will continue to discuss this influence in subsequent chapters.

Chapter 2: Musical Analysis

The following chapter is an analysis of the pitched elements, thematic and motivic content, formal considerations, and notational practices used in each section of the work. I will discuss the various decisions made during the composition process and how these decisions served to support the central programmatic narrative of mankind's destruction of nature. I will focus on each of the three primary sections of the work separately, but within those sections, I will cover all of the concepts from above in chronological order.

2.1 Section 1: Adagio

In terms of the programmatic narrative, Section 1 (mm. 1 – 66) serves to introduce the competing elements of the stage orchestra and balcony brass players. The stage musicians, particularly the winds and strings, represent all that is “natural,” be it the ecosystem; a particular, idyllic place; or perhaps animal-like beings. They are the naïve, unaltered natural environment. By contrast, the brass and electronic elements, both processed and fixed, represent mankind. Inside of this musical entity, there is a mechanical nature, a drive to understand and control all that it encounters. This grouping of brass is placed antiphonally in the balcony, in a position of authority or even supreme power, looking down upon the stage orchestra. This spatial separation serves to heighten the idea of the brass exerting control. Through the course of this opening section, the brass will interrupt the stage orchestra’s primary theme several times, and with each interruption they will gradually weaken the free character of this rhapsodic theme, bending the stage musicians to their will.

The work commences with an introductory set of aleatoric measures denoted by triangle numbers.¹³ This introduction establishes the free, asynchronous atmosphere of the opening section and provides the primary collection of pitches that will be used throughout the work. In terms of form, it can be viewed as the work “in miniature”: the first measure begins very brightly orchestrated; followed by a move toward a darker, more dissonant landscape in the second measure; and returning to a brighter yet changed state in the third bar.

In terms of pitch organization, it is important to note the pitch collection first played by the harp in the third free beat of measure one: B-flat, F, G-flat, C-sharp (D-

¹³ For clarity, all of the triangle-numbered aleatoric measures (with free cue beats) include each of the secondary cues at the dotted bar lines (i.e., measure one, numbered triangle “2,” does not finish until the solid bar line at the triangle event numbered “3” on the first page of the score).

flat), D, and A. This is the primary collection for the work, and it is the chord from which all other collections in the piece can be derived. One can look at the collection from the standpoint of its interval cycling: three stacked perfect fifths with two half steps in between them. Additionally, if you take this cycle one half step further, it begins to remap onto itself (returning to B-flat). One might also notice other qualities at play here; the collection can be broken down to two augmented chords stacked a minor third apart. There are numerous ways to reinterpret, re-voice, and respell this interesting collection of pitches. I attempted to take full advantage of this chameleonic trait by deriving several subset collections including major and minor chords. Note some of the triads that can be derived from the collection:

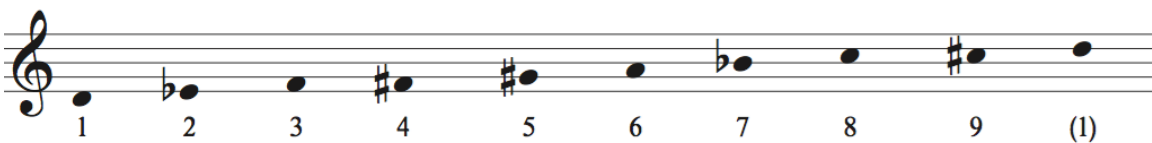
Figure 6 – Primary chord collection and derived triads



The tonal areas of B-flat and G-flat figure strongly into the opening of the work, in general.

In addition to the primary chord collection, I created a nine-note scale in which the primary chord can exist as a subset:

Figure 7 – Derived nine-note scale



From this scale I am able to quickly pivot between several tonal areas and infuse them with complementary dissonant tones from the remainder of the collection. Numerous subset scales exist inside of this derived scale including the B-flat minor scale (A-sharp minor in the strings) and G-flat major scale, both of which play a vital role in the piece. Due to the chromatically-altered nature of these scales at times, I elected to forgo the use of key signatures in the work. These tonal area scales each exist as subsets of the derived scale (Fig. 7); hence, they intermingle with chromatic alterations of the derived scale, itself. For these reasons, I felt that key signatures would only get in the way of what I was attempting to do, chromatically. One particular phrase that substantiates this line of thinking is the piano and vibraphone's transitional phrase at mm. 15 and 16. The notes are taken verbatim from the primary collection (Fig. 6); thus, they do not indicate a particular key area but, rather, a liminal space where multiple key areas could exist. Additionally, several other passages, like m. 24 in the celeste and vibraphone, lend themselves to a keyless world because of their rich chromatic alterations according to the derived scale.

Beginning at m. 4, a smooth moment of stasis commences to establish a tonal area of G-flat and the primacy of the fifth interval. The piano and vibraphone parts both contain voicings richly adorned in perfect fifths. These fifths in open voicings represent the purity of the natural landscape. Additionally, the first and second violin parts utilize only perfect fifth intervals in the high register, creating a sensation of floating. The feathered-beam aleatory of the piano, combined with the triplets of the vibraphone and bowed crotales, creates a watery aura. This stationary moment of the work acts as a stable anchor (similar to a tonic prolongation during the opening section of a sonata). The ensuing harmonic departure in the following phrase provides a necessary rejuvenation.

It should also be noted that much planning went into the exotic aleatory of the piano part during mm. 4 – 9. I was first turned on to the idea of using feathered beams, without explicit note placements underneath, after viewing John Corigliano’s work, *Phantasmagoria*. In the final section of this work, he instructs the harpist and woodwinds to improvise “free waves” of arpeggios, providing them only the collection and empty feathered beams to show where to speed up or slow down, contextually, within the pervading pulse.¹⁴ This approach was exactly what I was envisioning when I wrote this phrase in the DAW; I simply needed a clear method that would allow for thoughtful improvisations. Also, I did not want to scare away the pianist by using this system, so I was exceedingly thorough in my indications. The idea was to allow the performer to freely improvise within constraints and for the resulting improvisations to contradict the conducted pulse.

Finally, at measure 10, we are able to hear the primary theme of the work played in the violin voice (Figure 8):

Figure 8 – Primary theme in the violin, m. 10



This timid theme attempts to convey the innocence and beauty of the natural world through expressive leaps followed by downward melodic deflections. In terms of pitch, the theme still utilizes the same derived scale of Fig. 7, but now the emphasis is placed on the B-flat (A-sharp) minor subset scale. Throughout the entirety of the work, this theme permeates the musical fabric even at the subliminal level. Additionally, it sets up the

¹⁴ John Corigliano, *Phantasmagoria*, New York: Schirmer, 2000.

“natural” element in the piece which will be taken over and even absorbed later by the balcony brass ensemble. The programmatic stage is now set and ready for an oppositional force to instigate conflict.

Following the transitional phrase in mm. 15 and 16 (mentioned earlier), the brass and electronics disrupt the musical fabric for the first time. This is the first of several interjections which play an important dramatic role in both the form and programmatic narrative. From the standpoint of narrative, they represent the repeated waves which build toward the final “ninth wave.” With regard to form, the brass interjections provide a necessary counterbalance to the rhapsodic string, wind, and percussion music. Additionally, the strings and winds react and recoil in response to each subsequent statement by the brass. Programmatically, this represents the gradual control and destruction of the natural world. In terms of pitch content, the brass gives the appearance of confirming the tonal area of B-flat introduced in the primary theme, but there is more to this surface level connection to be discussed later. Additionally, there is a marked difference in the orchestration for the brass; I utilize strong unison rhythms for the most part instead of rhapsodic writing. Note the unison rhythmic quality during the first entrance of the brass at measure 17:

Figure 9 – Horn and bass trombone entrance at m. 17

The image shows a musical score for two instruments: Horn and Bass Trombone. The Horn part is written on a single staff with a bass clef. It begins with a whole note chord (B-flat, D-flat, F) marked 'open' and 'p' (piano). The Bass Trombone part is written on a single staff with a bass clef. It begins with a whole note chord (B-flat, D-flat, F) marked 'harmon mute' and '+' (plus). Both parts play a unison rhythmic pattern. The score is for measure 17.

The directness and forwardness of the articulation style coupled with the Scotch Snap rhythm (a sixteenth note followed by a dotted eighth note) provide a necessary counterpoint to the hesitant disposition of the stage orchestra's music.

After the initial brass entrance, the **“Wistful”** theme of measure 10 returns in the first violin; however, the re-entrance of the violin is marked by a greater hesitance than the prior iteration. This is the first of many moments when the stage orchestra reacts dynamically to the brass and electronics. Harmonically, the B-flat chord from m. 10 has been altered to include E-flat in the bass; this provides a slight departure from the previous rendition. The harmonic rhythm is also operating at a faster pace than at measure 10. Additionally, the first violin's theme expands its expressivity with greater intervallic leaps and the introduction of more filigree through the feathered-beam tuplet (Fig. 10):

Figure 10 – First violin at m. 19



Note the expanded intervallic leap of a minor 7th in the second measure of Fig. 10 (expanding the ascending perfect 5th from m. 11), and the highly expressive feathered tuplet in the final measure. Also, observe the half note placed above the last measure to

show the duration of the feathered gesture. I chose to utilize this particular method of notation for every complex, feathered-beam tuplet in the work, rather than using a system of rhythmic ratios. I find the ratios to be more intimidating in context, and I sought out simpler systems during my score study. John Corigliano's works often rely upon this particular variety to provide the duration of a given feathered-beam gesture in a clear and simple way.

Measure 24 leads us into a new transitional area with a soloist of a more bird-like character. The chirps of the clarinet solo provide a clearly-recognizable style of sound from the natural world. The pitch collection is now re-anchored to G-flat (confirmed by both the tolling piano chord and the melodic turn in the clarinet at the beginning of m. 25). The chromatically-altered G-flat scale is built out of the original derived scale in Fig. 7. During the course of the solo, the clarinet becomes increasingly exacerbated by mechanical drones, which grow organically out of the low G-flat piano chord and harp palm cluster with the cue at measure 25. This exacerbation manifests itself through feathered-beam gestures of increasing density and through the addition of the chromatic concert A-naturals, which clash vibrantly against the G-flat major sonority resonating in the piano. Notating this particular section presented several issues, and I responded with solutions that I deemed effective. For one, the return of aleatoric free beat cues necessitated a clear understanding of who would drive the piece forward to the next cue; I decided to charge the clarinet soloist with that task to allow them ultimate freedom. Once again, I will point to Corigliano's use of performer-driven aleatoric measures in his *Clarinet Concerto*. The opening "Cadenzas" movement employs a pervasive use of this technique, primarily with the clarinet soloist advancing through virtuosic cadenza

vignettes.¹⁵ Following Corigliano's approach, I omitted the timing indications favored so heavily by Druckman for the aleatoric events in measures 24 and 25. Additionally, the celeste, crotales, and vibraphone parts during this moment were difficult to notate. I wanted to provide a sense of weightlessness underneath the clarinet solo through eclectic, metallic sounds resembling wind chimes or an ethereal music box. Hence, I gave the performers the indication to "shadow" the other parts staying "just a little behind" in order to smear the resultant sound into a metallic blur. In terms of harmony, this trio is anchored tonally to D-flat major (derived, again, from Fig. 7). However, there is an element of harmonic ambiguity with the inserted D-naturals and A-naturals in the left hand of the vibraphone and celeste parts (both of which arise from the primary derived scale).

Beginning with the first beat of m. 26, the conductor regains control of timing, and the brass re-enter to again usurp the musical dialogue. This second interruption is more vicious than the first and is now punctuated by the slapstick and bass drum combination in the second percussion part. Additionally, the electronic processes occurring during this section are much more prominent in the musical texture as a result of the aggressive brass sounds that lead into m. 29.

At this point, it is important to draw attention to the motivic content that has been introduced by the brass. The three-note chromatic motive on count four in m. 28 provides a substantial amount of material for the remainder of the work. I wanted to introduce this motive dramatically after some time had elapsed to assist with the overall pacing. The second brass interjection (Fig. 11) provided the right moment for it:

¹⁵ John Corigliano, *Clarinet Concerto*, New York: Schirmer, 1977.

Figure 11 – 2nd brass interjection at m. 27

Figure 11 shows a musical score for measures 27 through 30. Measure 27 features a brass interjection in the tuba and euphonium parts, marked "brassy!" and "ff". A red box highlights the notes in measures 27 and 28. Measure 29 includes a "blur with Tbn. low moan..." instruction. Measure 30 has a "take your time low moan..." instruction and a "(Cue cut-off and next note; conductor follows you)" instruction.

This motive takes advantage of an attribute in the nine-note derived scale that is not apparent in the stage orchestra's thematic content: chromatically adjacent half-steps. The 5th, 6th, and 7th notes of the derived scale provide us with the tones A-flat, A-natural, and B-flat. This aspect of the scale will be utilized to a far more extreme extent by the brass in the middle portion of the work.

After the 2nd brass interjection, the violin recoils much more dramatically in proportion to the ferocity exhibited by the brass. This reaction is demonstrated in the “super flautando” playing of the violin in measure 30. In the following phrase at m. 32, the violin solo is now down one octave, and it exhibits a raspier, unassured tone. In fact, many of the previous notes are not present, which portrays the idea of the violin soloist losing its voice—much like the struggling creatures of the natural world enduring mistreatment. As a result, the flute part helps to chatter out the original notes using feathered-beam tuplets with staccato articulations (Fig. 12):

Figure 12 – Flute version of the primary theme at m. 32

Figure 12 shows a musical score for the flute part in measure 32. The flute part is marked "chattering, bird-like; with staccato" and "p". The notes are grouped in feathered-beam tuplets with staccato articulations.

This variant allows the flute to participate with the violin and clarinet to create a composite rendition of the primary theme. The act of creating composite or “fractured” versions of the primary theme will continue figuring strongly into the programmatic plan of gradual destruction throughout the remainder of the work. Every time the brass interrupts the stage orchestra, it will further alter and diminish the character of the orchestra’s musical material—a slow domination of the subservient natural world.

In measure 35, the clarinet and flute join together to continue the bird-like role from earlier, and the orchestration of the primary theme has now expanded to its strongest presentation up until this point in the piece. (It is doubled in all of the upper strings, bassoon, and oboe.) This moment builds toward the climax of Section 1 at m. 39. Here, the brass and electronics assume control of the musical dialogue with their most explosive statement up until this point. The Scotch Snap figure now plays a vital motivic role, equaling the importance of the chromatic triplet motive. Figure 13 illustrates the first few measures of the climactic event:

Figure 13 – Brass climax in Section 1 at m. 39

The musical score for measures 39-41 shows a brass climax. Measure 39 is marked 'Explosive! (♩ = 50)' and 'savage!'. The Horn (Hn.) and Bass Trombone (B. Tbn.) parts play a triplet of eighth notes (G4, A4, Bb4) followed by a quarter note (C5). The C Trumpet (C Tpt.) part is silent in measure 39. Measures 40 and 41 continue the triplet motif, with the C Trumpet joining in measure 40.

One might consider the role of the brass to be simply solidifying the tonal center of B-flat at m. 39. However, as mentioned before, the brass instigate change and forecast the coming scherzo in Section 2 of the piece. One should note the appearance of G-natural for the first time in m. 41; this indicates a move away from the original derived scale. While maintaining a tone center of B-flat, through a musical sleight of hand, I moved

away from the D-natural rendition of the derived scale to the C-natural transposition (Fig. 14). This allows the brass to appear as though they belong in the same tonal realm as the stage orchestra, while belying that realm through a pivot toward a new derived scale.

Figure 14 – Derived nine-note scale (transposed to C)



The C-transposition of the derived scale provides an important precursor to the middle section of the work. Hence, the brass climax to Section 1 is an important turning point in the piece as a whole.

Programmatically, each subsequent brass statement represents mankind’s gradual break down and control of the natural world. With each destructive interruption, the stage orchestra’s primary thematic music is pushed further into submission. The free, uninhibited essence of the orchestra (nature) begins to wither and die as the brass assume supreme control.

Following the climax, several other important transformations take place. First, the primary theme is again altered into a composite form. At m. 44 (“**Shuddering**”), the strings and flute work together to create a vibrant, timbral version of the theme which utilizes more extended techniques to color the pitches. The flute most notably makes heavy use of multiphonics to change the apparent hue of the pitch. Additionally, the strings play touch fifth, fourth, and minor third harmonics and harmonic glissandi to create a glittering, high-register texture woven from the pitches of the original theme. Dramatically speaking, the trumpet finally enters to deliver its first notes of the piece at

m. 50, which happen to be a pure recounting of the primary theme. This is the only time in which the balcony brass performs a pure version of this theme at any point in the work, and it marks a change from asynchronous rhythmic textures toward the relentless synchronicity of the scherzo in Section 2. Additionally, the live electronic processing of the brass makes a concerted change from asynchronous “grains” toward tightly-locked, rhythmic delay lines. The methods for accomplishing this change will be detailed more in chapter three. After the switch in the electronics, I created a short chorale section to provide a moment of repose before the brutality of Section 2 takes form. During this short, lyrical interlude, which is pitched in A-flat (deriving from the original scale in Fig. 7), we finally begin to hear synchronous rhythms between the stage orchestra and electronic processing. The delay line speed equates to sextuplets at the current tempo of 50 bpm, and the vibraphone voice begins to participate with these delay lines. Finally, after a reassertion of the three-note motive, now performed by the horn and trumpet, we arrive at m. 67 to begin Section 2 of the work.

2.2 Section 2: Scherzo

Regarding the programmatic narrative, Section 2 (mm. 67 – 231) provides an antithetical counterpart to the opening section of the work. In the final moments of the previous section, the brass had begun to assert control over the stage orchestra by imposing a synchronous rhythmic scheme (first introduced in the processing of the electronics). During the scherzo, this idea of control through synchronicity is taken to an entirely new level. Following in the footsteps of Andrew Norman, I created a rapid-fire juxtaposition of assorted musical materials beginning at m. 67. Here, several ideas commence which “play” upon various timbral, motivic, and harmonic ideas found previously in the work.¹⁶

First, the brass metrically modulates from 16th-note triplets (sextuplets, at 50 bpm) to an eighth-note pulse at 150 bpm; they accomplish this through the three-note chromatic motive introduced in Section 1 (Fig. 11). After this initial utterance, the harp and piano create a composite realization of the primary theme, underpinned by more flute multiphonics. Following yet another subsequent interruption of the three-note brass motive at m. 71, a bowed crotale on timpani pierces the musical fabric—a familiar timbre stemming from the very beginning of the piece. The three-note motive continues to pervade every brass interruption, developing and changing with each new pronouncement, while subsequently starting and stopping new musical events in the rest of the orchestra. One such event, which comes back several times, is the flying spiccato passage at mm. 73 and 74:

¹⁶ In Andrew Norman’s work, *Play*, he uses the percussion to “play” the other sections of the orchestra as if they are involved in a non-linear video game narrative. One example is the role of the triangle to “pause” and “resume” the current chords being played. I decided to use this paradigm and apply it to the brass; additionally, I added the percussion to create a more dramatic interruption of each musical idea.

Figure 15 – Violin’s flying spiccato passage at m. 73 and 74



This pitch collection combined with the B-flats in the celeste, flute, and clarinet adds up to a partial realization of the primary collection from Fig. 6. This rapid interplay of ideas, in the style of Andrew Norman, continues to provide renewed interest in the musical narrative of Section 2. Generally speaking, these continued interjections exist to telescope the initial interjections from Section 1. Programmatically speaking, they accelerate the perceived pace and energy level toward the “ninth wave” climactic event of the work. Lastly, the *col legno battuto* phrases that penetrate the soft moments leading into m. 89, provide a bridge between the synchronous electronic “grains” of Section 1 and the eighth-note pulse which commences at m. 89 in the strings.

It is at m. 89 that we finally get a tutti orchestral section of pulsed music with unison rhythms. This is the first time in the work that such a texture exists. With regard to the pitch system, the strings superimpose multiple transpositions of the nine-note derived scale:

Figure 16 – Superimposed derived scale collections and thematic amalgamation, m. 89

Relentless, with Ferocity! (♩ = 150)

arco ord. harsh, scratchy tone; on the string

IV

III (0)

ff

arco ord. harsh, scratchy tone; on the string

IV

III (0)

ff

arco ord. harsh, scratchy tone; on the string

IV

III (0)

ff

arco ord. harsh, scratchy tone; on the string

ff

arco ord. harsh, scratchy tone; on the string

ff

Primary theme; 1st four pitches

Three-note motive; reordered

The scale passage beginning with G-sharp in the contrabass and cello plays against the low-drone C-natural of the cello double-stop. These two pitch elements comprise the notes of the initial derived scale in Fig. 7 (G-sharp, A, B-flat, C, etc.). In addition, a superimposed transposition of the derived scale appears in the violin up a perfect 4th (beginning with the C-sharp). It should be noted that this ostinato theme is built of appropriated motivic/thematic materials from the first four notes of the primary theme in Section 1 (Fig. 8) combined with the chromatic, three-note motive of the brass (see Fig. 16, above). Hence, this occurrence represents an amalgamation of the prominent themes and motives from Section 1 and programmatically provides the implication that now the brass is forcing its own musical and programmatic character upon that of the stage orchestra. A hostile musical takeover now ensues until every trace of residual strength is removed from the stage orchestra. At m. 101, this entire superimposed pitch collection moves up a fifth to accommodate the open strings of G and D.

Later at m. 110, the brass move toward a new transposition of the derived scale centered on A-natural (up a 5th from the initial derived scale). There is a marked dominant function here, as if we were temporarily standing on the dominant of a home tonic key. In mm. 112 and 113, the balcony brass cascade back down to a derived scale centered on C-natural at m. 114. Finally, at m. 116 we are greeted with the quickest harmonic motion thus far in the piece with the chromatically ascending perfect 4^{ths}; this creates the effect of a rapid sequence through virtual derived scales. After more sequencing through derived-scale “keys” and rhythmically symmetrical pulse patterns in 5/4 meter—I am thinking of the symmetrical pulse pattern of accents at m. 114 (and elsewhere) on beats “1, 2, 3-&, &, &, 1”—the brass interject again at m. 124, playing an appropriated version of the primary theme. This particular moment is quite striking due to the dotted-eighth-note feel, which contradicts the prevailing eighth-note-driven pulse. This becomes the instigator of change to throw us into the suspended-time middle portion of Section 2 at m. 135.

At this point, time stops while the electronics greet us with a mocked-up recording of the free phrase from m. 4 against a tapestry of muttering chromatic triplets in the contrabassoon and bass clarinet. This constitutes a short remembrance of the previous brilliance of the beginning of the work—a remembrance of what used to exist in nature but has since been destroyed by man. The aleatory then moves toward synchronous eighth notes which create a steady pulse leading into m. 137. After several contradictory interruptions by the triplets in the bongo percussion part, another metric modulation takes place to move the pace of eighth notes to the speed of the bongo triplets (225 bpm). The strings take over briefly with an incredibly frenetic version of the ostinato theme from m. 89 followed by a brass interruption, which now, for the first time, is punctuated by synchronous delay grains at the original 150-bpm tempo. The programmatic rhetoric here

is that the most mechanical aspect of the music since the beginning (the electronic component) now gets to speak through punctuated notes from the primary theme (Fig. 8). The space between each punctuation is filled with synchronously delayed eighth notes (Fig. 17):

Figure 17 – Primary theme in the electronics and brass at m. 158

158 ← ♩ = $\frac{3}{4}$ → **Commanding!** (♩ = 150)

The musical score for Figure 17 shows measures 158, 159, and 160. The tempo is marked as 150. The brass instruments (Hn., C Tpt., B. Tbn.) play a 'Commanding!' motif. The CPU part consists of a sequence of eighth notes, with the pitched section labeled 'etc.'.

Programmatically, these punctuations show the final stage of the brass takeover, asserting its complete power over a weakened orchestral theme (the natural world). Mankind has now assumed full control over nature, and it proves to be reckless with its power, much as we have been since “conquering” the natural wilderness of our earthly home. Taming every wild crevice of land on earth does not allow for our natural landscapes to flourish properly and reciprocate for us by providing growth and sustenance. As Edward Burtynsky stated before, “if we destroy nature...we destroy ourselves...”; hence, our own inability to take care of nature will prove deadly for us. With this in mind, we must now turn to the conclusion of this section with the climactic event.

The climax at m. 192 represents the apocalyptic destruction of all things, both manmade and natural. In terms of the programmatic narrative, we destroy our world and ourselves in this singular event which escalates quickly to bring about our destruction. In the moments leading up to the event one can hear the pounding of “S.O.S.” Morse code in the percussion (three shorts, three longs, and concluded with three shorts), where the symmetrical metric accents from m. 114 have now shifted over to the principle S.O.S. rhythm in the tom part. The ship will not be saved, however; it is time for all that once was to cease to exist.

Following this event in the narrative, the violin begins to re-emerge after a significant pause, attempting to speak without much luck, at first. A couple of the interjection ideas from earlier in Section 2 attempt to make their last pleas before they can no longer speak. Finally, the violin can now begin to re-emerge into existence. This element of rejuvenation and possibly even reconciliation seems to have a hopeful bent.

2.3 Section 3: Chorale

Section 3 (mm. 232 — 266) provides a moment of repose and reflection following the climax of the work in Section 2. This moment harkens back to the short chorale that led into m. 67, where there was a symbiotic balance between the brass and stage orchestra. At m. 232, this final balance of the elements confirms the musical relenting of the brass in the overall scheme, which provides an opportunity for the stage orchestra to finally articulate the chorale in its complete form.

In terms of pitch, the chorale is centered in A-flat (G-sharp for the strings), and it provides a sense of return after the long departure that has ensued during the course of the work. The violin's primary theme from m. 10 returns with a far more toned-down version, which emerges cautiously and contrapuntally at times in the other strings and alto flute. This communal rendering of the theme hints at the need for all things to work together in cohesion. It is not until m. 254 that we receive the original violin theme, but this time the surrounding orchestration is not nearly as brilliant. Programmatically this bespeaks the fact that our natural world will never return to what it was originally; what's done is done. However, there is still the sensation that hope will prevail due to the fact that the music remains in a major sonority for so long in the end. It seems to suggest the notion that a reconciliation can take place.

Chapter 3: The Role of Electronics

Though I have demonstrated previously several ways in which the electronics have impacted the work in the analysis chapter, I needed to provide more specific information about the conception of the electronic sounds, my plans for the spatialization of those sounds, and a description of their role in my work, in general. I conceived each of the sounds of the work within Reaper. Using a DAW allowed me the necessary latitude to experiment expressively with the sound palette I wanted to use in the work, and it gave me a rather quick feedback mechanism to test and craft each of the sounds. The grainy textures I used arose out of my experiments with Destroy FX's "Skidder" plugin. This particular plugin relies upon sub-audio-rate amplitude modulation (AM) to produce the "grains" of sound (though, they are obviously not generated by classical granular synthesis techniques). In order to create a synchronously-aligned rhythmic profile, both the "(free) rate" and the "random minimum (free) rate" must equal the same value so that the rates of both amplitude modulators sync with one another. For each brass instrument, I chained together three of these Skidder plugins in series followed by a multi-tap delay. Consequently, I had to sync the multi-tap delays' rates to those of the Skidder modules, as well, in order to create synchronicity in the middle section of the work. I found that the use of at least three Skidder plugins in series provided the most compelling results especially for the asynchronous grain events. Finally, I will create a custom interactive program using Max/MSP to provide an intuitive method of advancing the circle-numbered electronic events in the score.

With regard to spatialization, I have plans to spatialize the electronics into eight distinct channels. For situations where synchronicity is pivotal, I want to provide the synchronous output of the brass to the 1st and 2nd channels of audio at the front of the

stage to avoid phasing issues as much as possible. Also, I will send the synchronous audio via one earbud channel to the conductor to assist in the syncing process. As for any asynchronous and atmospheric-drone elements, I feel that those could be diffused judiciously around the hall using a program like IRCAM's Spat.¹⁷ At one key moment in m. 158, however, I plan to move the synchronous grains around the eight-channel field to create a unique audience experience and to bolster this particular moment of pervasive electronic processing in my work. I am certainly aware of the technical challenges and limitations this setup will impose on my work in terms of the number of performances, so I have also planned to provide a simple two-channel version which would open up performances to many other schools and organizations.

In terms of their role, the electronics instigate critical changes which affect the musical trajectory, such as the overall move from an asynchronous, aleatoric texture in the initial brass interjections toward total synchronicity in Section 2. This move constitutes perhaps the simplest representation of the music as a whole: chaos moving toward order. In the end, chaos does not reign, but neither does order. The piece strikes a balance of “human” control vs. “natural” control in the end, using synchronous “grains.” Also, the brass finally step out of the way to allow the orchestra to perform its primary theme uninterrupted. This notion of the brass (mankind) playing a supportive role provides the possibility that we could one day live in harmony with nature, allowing it and ourselves to flourish.

With regard to the sounds, themselves, I created a palette of mechanical drone sounds which often pair with the brass throughout the work. These sounds have a machine-like quality which, combined with the ominous brass, provides the intrusive

¹⁷ (*Spatialisateur* in French) is a real-time spatial audio processor that allows composers, sound artists, performers, and sound engineers to control the localization of sound sources in 3D auditory spaces.

element of the work. The metallic drones have a sense of “otherness”, of not belonging, though they do emanate from sounds in the orchestra, at first. The drones, brass, and processing effects largely act as one musical character, intruding into the music of the stage orchestra. Every major formal articulation in the work receives impetus from these electronic soundscapes. They play a pivotal role in the dramatic arc and provide an antithetical response to the naturalness of the stage orchestra. Hence, the “waves” of the ninth wave concept are intrinsically bound to the electronic media within the piece. To imagine the work without these electronic sounds would be to diminish the intended rhetoric of the piece. The electronic element—asynchronous granularity moving toward synchronous rhythm—ultimately controls the destiny of the musical materials in the orchestra. It is the key agent of change in the work as a whole.

Chapter 4: Conclusions

The Ninth Wave has been the greatest compositional challenge of my life and perhaps the most rewarding. It is the culmination of my time at The University of Texas at Austin, and it represents the very best of my work. Without the help of great friends and family, this would not have happened. I am forever indebted to my professors and colleagues for believing in my ability to produce such a work, and it has provided numerous learning experiences which I will carry forth with me. I believe that, most importantly, the programmatic narrative of this work achieved and exceeded my initial goals. Also, I have finally written a single-movement work, greater than fifteen minutes in length, with a form that is defensible. Lastly, I wrote a piece that allowed me to explore the techniques used by artist Cai Guo-Qiang in my own way, and I believe that my musical reaction to his *Ninth Wave* exhibition provides an important and relevant voice which can help continue the conversation about the importance of caring for our planet.

The Ninth Wave

Chris Ozley

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The Ninth Wave

3 2'' 5'' 4''

Hrn

C Tpt

B. Tbn

CPU (Pitched)

Non-Pitched

Fl

B♭ Cl

Ob

Bsn

Crt

B. Tr

Cel

S TAGE

O R C H E S T R A

Hp

Pno

Vln. I

Vln. II

Vla

Vcl

D.B.

3

The Ninth Wave

4 Pristine; Idyllic... ($\text{♩} = 40$, subdivide 2)

Hr.

BALCONY
C Tpt.

B. Tbn.

Pitched
CPU
Non-Pitched

Fl.

B♭-Cl.

Ob.

Bsn.

Crt.

Vib.

Cel.

S.T.A.G.E.
O.R.C.H.E.S.T.R.A.
Hp.

D♯ A> (D♯ C B> / E F G♯ A>)

Pno.

pp

spial liberty

"Play free waves of arpeggios on the given notes. Start with the given onsets, and then deviate ad lib. during the feathered-beam grasping (though you should intensify the collections, organically). The effect is a watery, glittering texture."

pp swirling gently

mp

pp

Pristine; Idyllic... ($\text{♩} = 40$, subdivide 2)

Vln. I.

s.l. and

pp

f

Highly "ring" each release; full note durations (bow for one entire count every time).

Vln. II.

s.l. and

pp

f

Highly "ring" each release; full note durations (bow for one entire count every time).

Vla.

Vcl.

pizz.

p

normal

D.B.

The Ninth Wave

[illegible]

The Ninth Wave

This page of a musical score is for a symphony, featuring a variety of instruments and dynamic markings. The instruments listed on the left include Hrn. (Horn), B. A. L. C. O. N. Y. (Bassoon), B. Tbn. (Baritone Trombone), Cpu. (Cello), Non-Pitched (Non-pitched), Fl. (Flute), B. Cl. (Bass Clarinet), Ob. (Oboe), Bsn. (Bassoon), Crt. (Cornet), Vibe. (Vibraphone), Ccl. (Cello), S. T. A. G. E. (Stage), O. R. C. H. E. S. T. R. A. (Orchestra), Hp. (Harp), Pno. (Piano), Vln. I. (Violin I), Vln. II. (Violin II), Vla. (Viola), Vc. (Violoncello), and D.B. (Double Bass).

The score is divided into two systems. The first system includes Hrn., B. A. L. C. O. N. Y., B. Tbn., Cpu., Non-Pitched, Fl., B. Cl., Ob., Bsn., Crt., Vibe., Ccl., S. T. A. G. E., O. R. C. H. E. S. T. R. A., Hp., and Pno. The second system includes Vln. I., Vln. II., Vla., Vc., and D.B.

The tempo marking *poco rit.* (poco ritardando) is present at the top right of the page. The score includes various dynamic markings such as *mp* (mezzo-piano), *p* (piano), *pp* (pianissimo), *f* (forte), and *delicately*. There are also performance instructions like *bell tree* and *solo, rubato*.

The Ninth Wave

10 Wistful

49

50

[illegible]

The Ninth Wave

19 Again, Wistful

[illegible]

52

[illegible]

The Ninth Wave

1
2

B
A
L
C
O
N
Y

Hr.

C Tpt.

B. Tbn.

Priched

Non-Priched

Fl.

Bb-Cl.

Ob.

Bon.

Crt.

Vibr.

Cell.

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D.B.

1

2

solo, *trid-ida / ebraying*

p *f* *p* *p* *f* *p* *f*

Shadow Vibraphone part, stay just a little behind.
(The effect is a blurred texture of music box.)

p *trid-ida* *f* *pp* (Repeat 1x)

Shadow Celeste part, stay just a little behind.
(The effect is a blurred texture of music box.)

p *trid-ida* *f* *pp* (Repeat 1x)

Like a music box; with slight rubato (Approx. ♩ = 40)

Continue playing independently through the next conductor beat. Use rubato, but be sure that the percussion can follow you.

p *trid-ida* *f* *pp* (Repeat 1x)

** End the previous measure as if it were still in three (not 5/8); cut off with the strings.

Continue playing independently through the next conductor beat. Use rubato, but be sure that the percussion can follow you.

p *trid-ida* *f* *pp* (Repeat 1x)

** End the previous measure as if it were still in three (not 5/8); cut off together as a quartet.

n.

n.

n.

n.

The Ninth Wave

BALCONY

Hr.
C Tpt
B Thn

CPU:
Pitched
Non-Pitched

Ft.

D.Clt.

Obl.

Bon.

Crt.

Vibr.

Cel.

S.T.A.G.E.

O.R.C.H.E.S.T.R.A.

Hrp.

Pnc.

Vln. I

Vln. II

Vla.

Vcl.

D.B.

Forcefully! (conducted, ♩ = 100)

fz precisely!

open fz precisely!

(2) [Sound File: Low Drums (more evidence)]

(3) Processing: Ann Granulation

[low palm cluster hit the strings]

f percussive

fade away with piano decay f recumbent ff

The Ninth Wave

27

B
A
L
C
O
N
Y

Hr. *ff^o p* *brassy!* *3rd* *blat with Tho.* *blat again.* *n.* *p* *n.*

C Tpt. *ff^o p* *brassy!* *3rd* *blat with Tho.* *blat again.* *n.* *p* *n.*

B. Tbn. *ff^o p* *brassy!* *3rd* *blat with Tho.* *blat again.* *n.* *p* *n.*

Priched *ff^o p* *brassy!* *3rd* *blat with Tho.* *blat again.* *n.* *p* *n.*

Non-Priched *ff^o p* *brassy!* *3rd* *blat with Tho.* *blat again.* *n.* *p* *n.*

Fl. *ff^o p* *brassy!* *3rd* *blat with Tho.* *blat again.* *n.* *p* *n.*

Bb-Cl. *ff^o p* *brassy!* *3rd* *blat with Tho.* *blat again.* *n.* *p* *n.*

Ob. *ff^o p* *brassy!* *3rd* *blat with Tho.* *blat again.* *n.* *p* *n.*

Bsn. *ff^o p* *brassy!* *3rd* *blat with Tho.* *blat again.* *n.* *p* *n.*

Crt. *ff^o p* *brassy!* *3rd* *blat with Tho.* *blat again.* *n.* *p* *n.*

Slapstick B.D. *ff^o p* *brassy!* *3rd* *blat with Tho.* *blat again.* *n.* *p* *n.*

Cel. *ff^o p* *brassy!* *3rd* *blat with Tho.* *blat again.* *n.* *p* *n.*

S
T
A
G
E

O
R
C
H
E
S
T
R
A

Hp. *ff^o p* *brassy!* *3rd* *blat with Tho.* *blat again.* *n.* *p* *n.*

Pnn. *ff^o p* *brassy!* *3rd* *blat with Tho.* *blat again.* *n.* *p* *n.*

Vln. I *ff^o p* *brassy!* *3rd* *blat with Tho.* *blat again.* *n.* *p* *n.*

Vln. II *ff^o p* *brassy!* *3rd* *blat with Tho.* *blat again.* *n.* *p* *n.*

Vla. *ff^o p* *brassy!* *3rd* *blat with Tho.* *blat again.* *n.* *p* *n.*

Vc. *ff^o p* *brassy!* *3rd* *blat with Tho.* *blat again.* *n.* *p* *n.*

D.B. *ff^o p* *brassy!* *3rd* *blat with Tho.* *blat again.* *n.* *p* *n.*

The Ninth Wave

1 8"

30

B
A
L
C
O
N
Y

Hr.
C Tpt.
B. Tbn.

Pitched
CPU
Non-Pitched

Fl.
Bb-Cl.
Ob.
Bon.
Crt.
Vibr.
Cel.
Hp.
Pno.
Vln. I
Vln. II
Vla.
Vc.
D.B.

S
T
A
G
E
O
R
C
H
E
S
T
R
A

super flautando, feathery, as if having trouble speaking.
also [the electronics should dominate until the 24, but you should be present]

duration should gradually get longer until the dotted quarter in the next measure (has more solid feeling)

sl. with a slightly more assured bow stroke

pp p ppp p

The Ninth Wave

32 Wounded; Reticent... (♩ = 40)

The Ninth Wave

35 Growing More Desperate

BALCONY
 C Tpt.
 B. Tbn.
 CPU
 Non-Pitched
 F1.
 B. Cl.
 Ob.
 Bsn.
 Crt.
 Vibr.
 Cel.
 Hp.
 Pno.
 Growing More Desperate
 Vin. I.
 Vin. II.
 Vla.
 Vc.
 D.B.

The Ninth Wave

STAGE ORCHESTRATION

37

Hn.

C Tpt.

B. Tbn.

Pitched
CPU
Non-Pitched

Ft.
fury!
ff

B-Cl.
fury!
ff

Ob.
ff

Rhn.
ff

Sax Cym.
p

Tam B.D.
p

Cel.

Hrp.
ff

Pno.
ff

Vin. I
gliss.
M.V.
ff

Vin. II
gliss.
M.V.
ff

Vla.
gliss.
M.V.
ff

Vc.
gliss.
M.V.
ff

D.B.
ff

Processing: Ann Granulation/Delay

wild tremolo; bird call effect

wild tremolo; bird call effect

Wild Vibrato
wailing??

Wild Vibrato
wailing??

Sax Cym.
p

Low Tam
p

vibrant rumble

Wild Vibrato
wailing??

Wild Vibrato
wailing??

Wild Vibrato
wailing??

Wild Vibrato
wailing??

Wild Vibrato
wailing??

ff

The Ninth Wave

39 Explosive! (♩ = 50)

BLANCIN

Hr. *mf* *urgently*

C Tpt.

B. Tbn. *mf* *urgently*

CPU

Pitched

Non-Pitched

6

STAGE

Fl. *mf*

Bb-Cl. *mf*

Ob. *mf*

Bsn. *mf*

Sun. Cym.

Tom. B.D. *mf*

Cel.

Hp.

Pno. *mf*

Explosive! (♩ = 50)

Vln. I *mf*

Vln. II *mf*

Vla. *mf*

Vc. *mf*

D.B.

The Ninth Wave

42

44 Shuddering...

BALCONY

Hr.

C Tpt.

B. Tbn.

CPU

Pitched

Non-Pitched

Pf.

Bb Cl.

Ob.

Bsn.

Crot.

Vibr.

Cel.

STAGUE

ORCHESTRA

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D.B.

Shuddering...

arco and light vib.

$p < f$

$p < mp$

The Ninth Wave

45

Hr.

B A L C O N Y

C Tpt.

B Tbn.

CPU

Pitched

Non-Pitched

Fl.

f

p

p

ff

f

ff

ff

Br. Cl.

Ob.

Bsn.

Crot.

bowed

p

mp

p

f

Vibr.

Cel.

Hp.

Pno.

Vln. I

flautando, feathery

pp

f

pp

near the point of the bow

pp

f

pp

f

Vln. II

pp

f

pp

f

p

f

p

f

Vla.

SOLO s.p.

p

f

p

mp

Vc.

harmonic gliss.

p

D.B.

The Ninth Wave

[illegible]

The Ninth Wave

50

Hrn.

C Tpt.

B. Tbn.

Pitched

CPU

Non-Pitched

Ft.

B♭-Cl.

Ob.

Bsn.

Crot.

Vibr.

Cel.

S

T

A

G

E

O

R

C

H

E

S

T

R

A

Hrp.

Pss.

Vln. I

Vln. II

Vla.

Vcl.

D.B.

straight note

pp

f

p

mp

p

mp

p

Processing: Triggers move toward synchronous "grain."

7

to Alto Flute

p < mp

gliss.

flourish strokes

fading into the electronic texture...

ad.

f

p < mp

p < mp

pp

(D9) (C9)

x.p.

p < mp

p < mp

The Ninth Wave

54 A Moment of Stasis (Chorale)

53

B
A
L
C
O
N
Y

Hr.
C Tpt.
B. Tbn.
Patched
CPU
Non-
Patched

Heavy!

Sing the bell to elicit a bit of upper partials for the electronic grain.

p

mf

Pressing: The "grains" are now synchronized (eight notes at once - 1980s) they should fit to the reception at the current tempo (note = 90b).

A. Fl.
Bb-Cl.
Ob.
Bsn.
Crot.
Vibr.
Cel.
S
T
A
G
E
O
R
C
H
E
S
T
R
A
Hp.
Pnn.
Vln. I
Vln. II
Vla.
Vc.
D.B.

Alto Flute light vib.

pp

The speed of these sextuplets = the speed of the electronic delay (from "grains") from the brass. The conductor will help you to give with them. This is important due to the general metric ratios in the piece.

pedal liberally

pp flowing.

A Moment of Stasis (Chorale)

arco sl. light vib.

pp

arco s.p. tremolo

p

pp

66

[illegible]

67

[illegible]

68

[illegible]

69

61

Hr.

B A C O N Y

C Tpt.

[B. Tho.]

Pitched
CPU
Non-Pitched

A. Fl.

B♭-Cl.

Ob.

Bsn.

Crot.

Vibr.

Cel.

S T A G E

O R C H E S T R A

Hrp.

Pno.

Vln. I

Vln. II

Vla.

Vcl.

D.B.

double-tongue
dig those out, as precise as you can!

dig those out, as precise as you can!

****UNDER C TONE'S NOTE****
The semiquaver speed of the delays becomes the eighth-note speed in the next section (bars ~ 108).

Processing: Turn off Tpt. and Thn. "grain"

to drum set-up / slaps!

faster strokes

and

Asynchronous, evaporate: Smear rhythm into a blur as you fade out.

The Ninth Wave

63

B
A
L
C
O
N
V

Hr.

C Tpt.

B. Tbn.

Priched

Non-Priched

Fl.

Bb-Cl.

Ob.

Bsn.

Crot.

Bongos /
Toms /
B.D. /
Shapt. /
Bate

Cel.

S
T
A
G
E

O
R
C
H
E
S
T
R
A

Hp.

Pnn.

Vln. I

Vln. II

Vla.

Vc.

D.B.

Butter

to open

CONDUCTOR'S NOTE
Try to line up the result should be a two-note
accented pattern (forecasting the coming pulse)

fade to nothing

fade to nothing

** not begins bottom, incorrectly, this should fit with
the electronic "grains" from the brass.
Follow the conductor*

** (6:13)*

** (6:13)*

pp *f* *pp* *pp*

The Ninth Wave

[illegible]

The Ninth Wave

67 $\text{♩} = 150$ **Visceral** ($\text{♩} = 150$)

Hrn. p open ff
 Bb. Tbn. p open ff
 Cpu. p open ff
 Pchd. p open ff
 Non-Pchd. p open ff
 Fl. f monolithic!
 Bb-Cl. p monolithic!
 Ob.
 Bsn.
 Bwrd. f $\text{lower octave on edge of timpani (32")}$
 Timp. f
 Crot.
 Bongos /
 Toms /
 B.D. /
 Shapt. /
 Rats ff
 Cel.
 S. T. A. G. E.
 O. R. C. H. E. S. T. R. A.
 Hp. p $\text{Bridglands with a small stick. Should sound as if broken or shuddering}$ p mp
 Pno. p mp [trans]
 Vln. I $\text{[weightless... ignore barlines and follow behind the harp. Stretch the notes to the extreme to belie the unadorned tempo! Should end before the brass re-enter in m. 71 count 2]}$
 Vln. II
 Vla.
 Vc. $c.l.b.$ $\text{strict time, but vary subtly!}$ pp p pp
 D.B.

The Ninth Wave

72

Hn.

C Tpt.

B. Tbn.

Pitched
CPU
Non-Pitched

Ft.

Br. Cl.

Ob.

Bsn.

Bowed
Temp.
Crot.

Bongos /
Toms /
B.D.
Slaps /
Rute

Cel.

Hr.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D.B.

pedal (impact up
and down (ad lib.))

to Marimba

spiccato
0 9

ff

f marcato!

ff

f

(Processing: Turn on Horn
glitch filter (player))

10

The Ninth Wave

77

B
A
L
C
O
N
Y

Hr.

C Tpt.

B. Tbn.

Priched

Non-Priched

Fl.

Bb-Cl.

Ob.

Bsn.

Mba.

Bongos /
Toms /
B.D. /
Shapt. /
Bate

Cel.

S
T
A
G
E

O
R
C
H
E
S
T
R
A

Hrp.

Pnn.

Vln. I

Vln. II

Vla.

Vc.

D.B.

p *ff*

p *ff*

f *multidisco?* *pp*

p *multidisco?* *f* *pp*

ff

high
p *mp* *p* *f* *p* *p* *f* *p* *D.C.G.*

8va
p *mp* *f*

Use the same approach as before, end by m. 82 *ritard.* *staccato*

sfz tremolo
p *mp* *p* *f* *p* *f* *p* *mp*

clb.
pp *p*

The Ninth Wave

86 G.P. 89 Relentless, with Ferocity! (♩ = 150)

BALCONY

Hrn.

C Tpt.

H. Tbn.

Pnched

CPU

Non-Pnched

Fl.

B. Cl.

Ob.

Hrn.

Mba.

Bongon / Tom / B.D. / Slaps / Rite

Cel.

Hp.

Pno.

Relentless, with Ferocity! (♩ = 150)

Vln. I

Vln. II

Vla.

Vc.

D.B.

The Ninth Wave

92

94

HALCORN V

Hn

C Tpt

B. Tbn

Priched

Non-Priched

F1

B-C1

Ob

Bsn

Mbn

Bongon /
Tambu
B.D.
Slapst.
Bate

Cel

Hrp

Pno

Vln. I

Vln. II

Vla

Vcl

D.B.

STAGE ORCHESTRATION

The Ninth Wave

[illegible]

The Ninth Wave

[illegible]

The Ninth Wave

107

Hrn

C Tpt

B. Tbn

CPU

Pitched

Non-Pitched

Fl

Br. Cl

Ob

Bsn

Mbn

Toms / B.D. / Rate

Ccl

S T A G E

O R C H E S T R A

Hp

Pno

Vln I

Vln II

Vla

Vcl

D.B.

110 More Nimble

mf precise

mf precise

mf precise

mf precise

mf steady; immovable

mf steady; immovable

f p

dampen with opposite hand

mf

mf steady; immovable

More Nimble

The Ninth Wave

112

Hr.

BALCONY

C Tpt.

B. Tbn.

Pitched

Non-Pitched

Fl.

B♭ Cl.

Ob.

Bsn.

Mb.

Toms /
Drum

Cel.

S T A G E

O R C H E S T R A

Hr.

Hr.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D.B.

DE CIG

f *mf* *f* *mf* *f*

mf *f* *p*

The Ninth Wave

[illegible]

The Ninth Wave

122

124

BALCONY

Hr.

C Tpt.

B. Tbn.

Piccolo

Non Piccolo

Fl.

B. Cl.

Ob.

C. Bsn.

Mba.

Toms / B.D. / Rte.

Cel.

Hr.

Pno.

Vln. I

Vln. II

Vla.

Vcl.

D.B.

f

p

grain

breath

arco ord.

The Ninth Wave

The Ninth Wave

[illegible]

The Ninth Wave

3 4" Suddenly Static (Remembrance)

CONDUCTOR'S NOTE:
Basso Continuo will pace this beat (use of the event).

5"

Gritty, Dark (Approx. ♩ = 40)

Continue with the pattern. Use any chromatic pitch within the specified range from F to A.

Continue in a similar manner. Add range to the gestural run (keeping the notes of the collection the same), but always return to the staccato low C. If the low C is not present on your instrument, use low E.

Continue in a similar manner. Add range to the gestural run (keeping the notes of the collection the same), but always return to the staccato low D. Vary the length of each pattern, imperative note ordering. Be responsive.

Continue with clusters every 4 seconds, or so, count independently of the conductor. Asynchronous.

Suddenly Static (Remembrance)

basso begins cod begins battuto (♩ = 150; follow the bassist) and before the bassist completely fades out.

cod begins battuto (♩ = 150; cellist follows you.)

3

86

[illegible]

The Ninth Wave

137 Relentless Pulse (♩ = 150)

88

141

Hrn

B. A. L. C. O. N. Y.

C Tpt

B. Tbn

CPU

Pitched

Non-Pitched

Fl

B. Cl

Ob

C. Bsn

Bongos

Trm / B.D. / Bass

Ctr

Hrp

Pnc

Vln. I

Vln. II

Vla

Vcl

D.B.

p

f

pp

mf

ff

The Ninth Wave

145  **Reckless Speed! (♩ = 225)**

1 **3"**

B
A
L
C
O
N
Y

Hr.
C Tpt.
B. Tbn.
Prtched
CPU
Non-
Prtched

Fl.
B. Cl.
Ob.
C. Ba.

Bongos
Toms /
B.D. /
Rute

Cel.
Hp.
Pnn.

S
T
A
G
E
O
R
C
H
E
S
T
R
A

Reckless Speed! (♩ = 225)

Vln. I
Vln. II
Vla.
Vc.
D.B.

arco ord. harsh, scratchy tone; on the string
arco ord. harsh, scratchy tone; on the string
arco ord. harsh, scratchy tone; on the string
arco ord. harsh, scratchy tone; on the string
arco ord. harsh, scratchy tone; on the string

1

Use this or another rich multiphonic that you can play at a medium soft level to balance the flute.
mp multiphonics?

rate down
pick up stick

independent?
possible

The Ninth Wave

149 Again, Reckless (♩ = 225)

150 Again, Reckless (♩ = 150)

BALCONY

Hr.

C Tpt.

B. Tbn.

CPU

Pitched

Non-Pitched

F1.

B. Cl.

Ob.

C. Bn.

Horns

Toms / B.D. / Rm.

Cel.

STAGE

ORCHESTRAL

Hr.

Pno.

Vin. I

Vin. II

Vla.

Vcl.

D.B.

Processing: Atom synchronous brass "grain."

Processing: Brass delay (as in item 150)

Only notation is only an approximation of the actual event.

13

The Ninth Wave

153

155 *Desperately!* (♩ = 225)

BALCONY

Hr.

C Tpt.

B. Tbn.

CPU

Pitched

Non-Pitched

Fl.

B. Cl.

Ob.

C. Ba.

Bongos

Toms / B.D. / Rute

Cel.

STAGE

O.K. H.E. STRA

Hp.

Pno.

Vln. I

Vln. II

Vla.

Vc.

D.B.

Desperately! (♩ = 225)

92

158 - $\text{♩} = 150$ - **Commanding!** ($\text{♩} = 150$)

BALCONY

Hr. ff

C Tpt. ff

B. Tbn. ff

CPU

Pitched etc.

Non-Pitched

STAGE

F1

B. Cl. ff

Ob. ff

C. Bsn. ff

Bongos ff to Marimba

Toms / B.D. / Rm. ff Substituting?

Cel.

Hp.

Pno. ff

ORCHESTRA

Vln. I ff

Vln. II ff

Vla. ff

Vc. ff

D.B. ff

The Ninth Wave

162

Hrn.
 B
A
L
C
O
N
Y
 C Tpt.
 Bb Tbn.
 CPU
 Patched
 Non-Patched
 Fl.
 Bb Cl.
 Ob.
 C. Ba.
 Mba.
 Toms / B.D. / Rute.
 Cel.
 S T A G E
 O R C H E S T R A
 Hp.
 Pno.
 Vln. I
 Vln. II
 Vla.
 Vc.
 D.B.

The Ninth Wave

166

Hr.
 C Tpt.
 Bb Tbn.
 Patched
 Non-Patched
 Fl.
 Bb Cl.
 Ob.
 C Ba.
 Mba.
 Toms/B.D./Rt.
 Cel.
 STAGUE
 O.K.C.H.E.S.T.R.A.
 Hp.
 Pno.
 Vln. I
 Vln. II
 Vla.
 Vc.
 D.B.

95

[illegible]

The Ninth Wave

[illegible]

The Ninth Wave

[illegible]

The Ninth Wave

The Ninth Wave

188 Losing Control! (accel./cresc.)

Hn.
 C Tpt.
 B. Tbn.
 PCHD
 Non-PCHD
 Fl.
 B. Cl.
 Ob.
 C. Ba.
 Br. Drs./Sngst.
 Toms/B.D./Rt.
 Ctl.
 Hp.
 Pno.
 Vln. I
 Vln. II
 Vla.
 Vc.
 D.B.

Hn. *wailing!!!*
 C Tpt. *slide across up to flutter-tongue*
 B. Tbn. *wailing!!!*
 PCHD *Processing: Fade to synchronous delay "grains."*
 Non-PCHD
 Fl. *ff*
 B. Cl. *ff*
 Ob. *ff*
 C. Ba. *ff*
 Br. Drs./Sngst. *ff*
 Toms/B.D./Rt. *ff*
 Ctl. *ff*
 Hp. *ff*
 Pno. *ff*
 Vln. I *ff*
 Vln. II *ff*
 Vla. *ff*
 Vc. *ff*
 D.B. *ff*

Multiphonics: relentless
 (loud and wailing)
 like a primal scream
dividing!!!
 Bring out the more code accents
ff
 hand clusters
 (approx. one octave)
 jagged notes!
 to full pressure; abuse your bow
 to full pressure; abuse your bow
 to full pressure; abuse your bow

Losing Control! (accel./cresc.)
 Losing Control! (accel./cresc.)
 Losing Control! (accel./cresc.)

The Ninth Wave

3 6" The Ninth Wave...

192

Hr. *waiting wildly!!!* *ad lib.* *longest, short* *7"*

B. A. L. C. O. N. V.

C. Tpt. *Glas. downward, approximate pitch.* *Open* *12-valve slow and expressive; ad lib.* *p*

B. Tbn. *waiting wildly!!!* *slowly downward; ad lib.* *(5th partial)* *(5th partial)* *p*

Priched *Preceding slow fade out the delay gates* *Grand File: Chromatic Collisions??*

CPU *Non-Pitched* *(17)*

Fl. *Stop abruptly with the electronic blast!*

B. Cl. *to Bb Clarinet*

Ob. *Stop abruptly with the electronic blast!*

C. Ba. *to Bassoon*

Br. Des. *to Marimba*

Tomu/ B.D. Slapst. *Relentless barrage (always continuous). [flexible tempo. Should sound robotic. Follow the shape of the line to choose which drums to use.]* *Stabilize onto the lowest tom.*

Cel.

S. T. A. G. E.

O. R. C. H. E. S. T. R. A.

Hrp. *1.v.* *Pedal Glas. - Keep the pedal in between the matches as long as possible to make it very buzzy as long as you can!* *string buzz. LOUD!! Keep the pedal still while it buzzes!* *On your own time; not with conducted beats sim.* *(Finish pedalling to F!)* *etc.*

Pnn. *continue alternating clusters, accel. during the decent.* *molto?* *On your own time; not with conducted beats* *with conducted beat* *On your own*

The Ninth Wave...

Vln. I *Full scratch tone; asynchronous with other string parts. as grotesque as possible...*

Vln. II *Full scratch tone; asynchronous with other string parts. as grotesque as possible...*

Vla. *Full scratch tone; asynchronous with other string parts. as grotesque as possible...*

Vc. *Full scratch tone; asynchronous with other string parts. as grotesque as possible...*

D.B.

3

The Ninth Wave

3
5"

6" 10" G.P.

B
A
L
C
O
N
Y

Hr.
C Tpt.
B. Tbn.

CPU
Patched
Non-Patched

Fl.
Bb-Cl.
Ob.
Bon.

Mba.
Toms/
B.D.
Slapst.

Cel.

S
T
A
G
E

O
R
C
H
E
S
T
R
A

Hr.
C Tpt.
B. Tbn.

Fl.
Bb-Cl.
Ob.
Bon.

Mba.
Toms/
B.D.
Slapst.

Cel.

Hp.
Pnn.
Vln. I
Vln. II
Vla.
Vc.
D.B.

f palm cluster, lowest strings
Each cluster with conducted beat
mf Every cluster
Slightly after lamp
With conducted beat
p With conducted beat
slow dampen, fade to nothing...
D C B / E F G A

3
5"

The Ninth Wave

195 Slowly emerging... (♩ = 40) *rit.* **Irksome** (♩ = 150)

B
A
L
C
O
N
Y

Hr.
C Tpt.
B. Tbn.

CPU
Patched
Non-Patched

Fl.
Bb-Cl.
Ob.
Bsn.
Mba.
Toms/
B.D.
Slapst.

S
T
A
G
E
O
R
C
H
E
S
T
R
A

Cel.
Hp.
Pno.

Slowly emerging... (♩ = 40) *rit.* **Irksome** (♩ = 150)

super flautando, flautarsi, or if having trouble speaking, ad lib.
solo, rubato broken, repeated...

a little vibran emerging

Vln. I
Vln. II
Vla.
Vc.
D.B.

ppp *pp* *n.* *ppp* *pp* *p*

intensive

The Ninth Wave

200 Further Emergence... (♩ = 75, half time)

BALCONY
C Tpt.
B. Tbn.

Priched
Non-Priched

Fl.
Bb-Cl.
Ob.
Bon.

Mba.

Toms/
B.D.
Slapst.

Cel.

STAGE
O.K.
H.E.
S.T.R.
A.

Hp.
Pno.

Vln. I
Vln. II
Vla.
Vc.
D.B.

mf motionless!

p motionless!

f

pp

f

pp

to Shapstick

f

pp

fl.

C Eb

f

super flautando, feathery

slowly adding more vibrato

ppp

pp

p

The Ninth Wave

205 (♩ = 150)

B
A
L
C
O
N
Y

Hr.
C Tpt.
B. Tbn.

Priched
Non-Priched

Fl.
Bb-Cl.
Ob.
Bon.

Mba.
Toms/
B.D.
Slapst.

Cel.

S
T
A
G
E

O
K
C
H
E
S
T
R
A

Hp.
Pno.

Vln. I
Vln. II
Vla.
Vc.
D.B.

p *p* *mp* *p* *mp*

painfully... *N.V., slowly adding vibrato* *port. normal vib.*

n.

The Ninth Wave

210 Much Weaker Than Before (♩ = 150)

The Ninth Wave

[illegible]

The Ninth Wave

220 Suddenly Energized!

The Ninth Wave

224 Growing Slowly (♩ = 50)

B
A
L
C
O
N
Y

Hr.
C Tpt.
B. Tbn.

Priched
Non-Priched

A. Fl.
Bb-Cl.
Ob.
Bon.
Crt.
Vibr.
Cel.
Hp.
Pno.

S
T
A
G
E
O
R
C
H
E
S
T
R
A

Growing Slowly (♩ = 50)

super flautando; very sacrally, wood...
solo, rubato

Vln. I
Vln. II
Vla.
Vc.
D.B.

The Ninth Wave

227

B
A
L
C
O
N
Y

Hr.
C Tpt.
B. Tbn.

CPU
Patched
Non-Patched

A. Fl.
Bb-Cl.
Ob.
Bon.

Crt.
Vibr.

Cel.

S
T
A
G
E
O
R
C
H
E
S
T
R
A

Hp.
Pno.

Vln. I
Vln. II
Vla.
Vc.
D.B.

gaining more of a voice; slowly add more vibrato
pp *mp* *p < f* *p < mf* *pp*

II
feathery...

The Ninth Wave

232 Chorale (♩ = 50)

HA
Hr.
C Tpt.
Bb Tbn.

floating...
pp *p* *pp*
(harmon mute) *fl.*
p *p* *pp*

CPU
Patched
Non-Patched
Patched
Non-Patched

Processing: Turn on synchronous delays for all brass
(18)

STAGE
A. Fl.
Bb-Cl.
Ob.
Bsn.
Crt.
Vibr.
Cel.
Hp.
Pnn.

Also Flute *light vib.* *vibrato grows/ceases with dynamic swell*
pp *p* *pp* *p* *mp* *pp*
Pedal liberally
pp *p*

Chorale (♩ = 50)

Vln. I
Vln. II
Vla.
Vc.
D.B.

arco *s.t.* *light vibrato* *grows/ceases with dynamic swell*
pp *p* *pp* *p* *mp* *pp*
arco *s.p.* *tremolo*
p *p* *pp* *pp* *p*
quick swell
pp *p* *pp* *p*

The Ninth Wave

235

R
A
L
C
O
N
Y

Hn.

C Tpt.

B. Tbn.

Pitched
CPU

Non-
Pitched

A. Fl.

B♭ Cl.

Ob.

Bsn.

Crn.

Vibr.

Cel.

S
T
A
G
E

O
R
C
H
E
S
T
R
A

Hr.

Pnn.

Vln. I

Vln. II

Vla.

Vcl.

D.B.

p

mp

f

pp

labored and resolute

quickly dying away

bowed

quick cresc. into beat 1

arco ord.

The Ninth Wave

238

B
A
L
C
O
N
Y

Hr.
C Tpt.
B. Tbn.

Priched
Non-
Priched

A. Fl.
Bb-Cl.
Ob.
Bon.

Ctr.
Vibr.

Cel.
S
T
A
G
E
O
R
C
H
E
S
T
R
A

Hp.
Pnn.

Vln. I
Vln. II
Vla.
Vc.
D.B.

pp *p* *pp*
p *mp* *n.*
p *p* *pp*
molto *f* *quicker dying away* *n.*
pp *p* *pp* *p*
mp *pp*
molto *f* *n.*
f *n.*
labored and resonant *f* *n.*
labored and resonant *f* *n.*

113

[illegible]

The Ninth Wave

[illegible]

The Ninth Wave

247

B
A
L
C
O
N
Y

Hr.
C Tpt.
B. Tbn.

Priched
CPU
Non-Priched

A. Fl.
Bb-Cl.
Ob.
Bon.

Ctr.
Vibr.

Cel.
S
T
A
G
E
O
R
C
H
E
S
T
R
A

Hp.
Pno.

Vln. I
Vln. II
Vla.
Vc.
D.B.

mp *f* *quickly dying away* *n.*

pp

pp *p* *pp* *p* *pp*

pp *p* *pp*

f *n.*

labored and resonant *f* *n.* *pp* *p* *f*

labored and resonant *f* *n.* *pp* *p* *f*

The Ninth Wave

250 251

BALCONY
C Tpt.
B. Tbn.
CPU
Patched
Non-Patched
A. Fl.
Bb-Cl.
Ob.
Bsn.
Crt.
Vibr.
STAGE
Cel.
O R C H E S T R A
Hp.
Pno.
Vln. I
Vln. II
Vla.
Vc.
D.B.

pp p pp

p mp n.

p p pp

mp pp p pp p

p pp mp

15th Pedal liberally; twinky...

(Both hands played two octaves above written)

p

p f p mp f

1

sweeping ff p mp p mp

sweeping ff p mp p mp

254

117

118

256

B
A
L
C
O
N
Y

Hn.

C Tpt.

B. Tbn.

Pitcd.
CPU

Non-
Pitched

A. Fl.

B♭ Cl.

Ob.

Bsn.

Crt.

Vib.

Cel.

S
T
A
G
E

O
R
C
H
E
S
T
R
A

Hr.

Hp.

Pno.

Vln. I.

Vln. II.

Vla.

Vcl.

D.B.

pp

p

pp

f

mf

f

ff

n.

f

p

harmonic gliss.

The Ninth Wave

259

B
A
L
C
O
N
Y

Hr.
C Tpt.
B. Tbn.

CPU
Patched
Non-Patched

A. Fl.
Bb-Cl.
Ob.
Bsn.

Crt.
Vibr.

to Bell Tree (two triangle beaters)
add lib.
continue ad lib. and slowing down
sparkling, but fading...
* use two small triangle beaters to strike the individual bells of the tree at random. Play spacious, gapped waves of notes, imitating wind chimes. This should generally be slowing down until the end of the piece... slowly, twilight.

(JSTM)

Cel.
evaporating...
ppp

S
T
A
G
E
O
R
C
H
E
S
T
R
A

Hrp.
Pno.

Vln. I
as smoothly as possible
p
pp
p
pp
p
p < mp

Vln. II

Vla.

Vc.
f
p

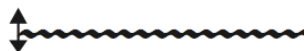
D.B.

The musical score is arranged in a standard orchestral format. The woodwind section (top) includes Horns, C Trumpets, Baritone Trombones, Clarinets (Patched and Non-Patched), Flute, Bb Clarinet, Oboe, Bassoon, and Cor Anglais. The string section (bottom) includes Violins I and II, Viola, Violoncello, and Double Bass. Percussion includes Triangle (JSTM), Chimes (Bell Tree), and Gong (Gong). The score features various musical notations such as dynamics (pp, p, f, ppp), articulation (accents, slurs), and performance instructions (e.g., 'as smoothly as possible', 'evaporating...'). The score is divided into measures by vertical bar lines.

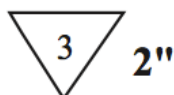
120

[illegible]

Appendix A: Explanation of Extended Techniques



Aperiodic trill up and down one half step.
(Play all three notes in any order.)



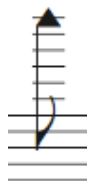
Downbeat of an unmetered measure; number in triangle indicates number of subdivisions. Number to the right of the triangle indicates the approximate duration.



A note value over a feathered-beam tuplet indicates the duration of the entire tuplet grouping.

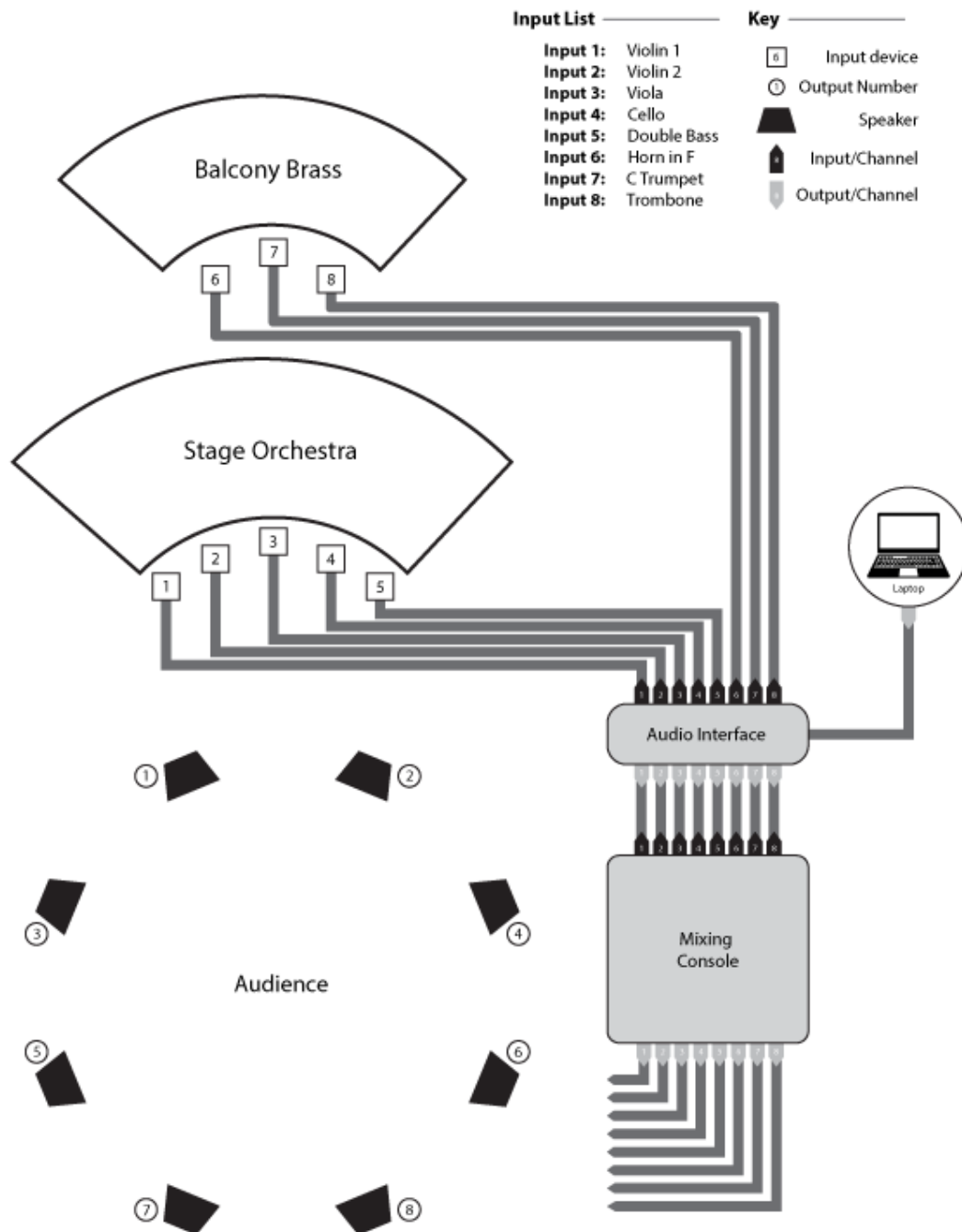


Square note heads indicate indefinite pitch.
Approximate the pitch using staff position.



Perform the highest note.

Appendix B: Electronics and Performer Setup Diagram



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Vita

Chris Ozley writes music across a broad spectrum of media, from the chamber orchestra to electronic interactive controllers. He has always been fascinated with form, specifically ways to stretch and distort perception. He is drawn toward non-linear narrative and interruption and strives to create compelling drama. His music is influenced by his percussion background as well as his experiences in rock and roll, and his works have been recognized by several organizations including ASCAP, SCI, and SEAMUS. In the spring of 2018, he was recognized as a finalist for the prestigious ASCAP/SEAMUS Student Commission. His pedagogical works for band are published by FJH Music Company, and his art music works are published through his own in-house publishing company. His primary composition teachers have been Russell Pinkston, Dan Welcher, Yevgeniy Sharlat, Bruce Pennycook, Donald Grantham, and Mike D'Ambrosio.

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This dissertation was typed by the author