

## ABSTRACT

*Arkhē:*

*for mezzo-soprano, tenor, double bass, percussion, and electronics*

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In this composition for two voices, double bass, percussion, and electronics, two individuals regard the night sky and experience disparate internal reactions to its expanse. Unlike many other pieces for more than one voice, these two characters never interact directly. Instead, their words and worldviews are juxtaposed to create a composite meaning from their feelings of fear and wonder towards the cosmos.

Arkhē: for Mezzo-Soprano, Tenor, Double Bass, Percussion, and Electronics

by

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A Thesis

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## ARKHĒ

Arkhē: Something that was in the beginning: a source of action.

### *Origin*

It was a hot, balmy summer evening at my father's home in Houston when the beginnings of this idea first came to me. I was sitting on the porch, watching cars drive by under the wide expanse of a crowded city sky. I watched as a procession of people were going about their lives, keeping their eyes (reasonably so) on the road in front of them. Heading home to see their families... to feed their pets... to get ready for the next day. At the time I remember being oddly struck by the direction of their gazes—straight ahead, occasionally peeking at their rearview mirrors to make sure they were driving safely. Having the external and admittedly sanctimonious perspective of being on my porch and being free from the anxieties of driving safely within a big city, I thought to myself—why is no one looking at the sky? It was a rare occasion such as this that one could look up at the sky at night and see a few stars peeking through the smog. From where I was sitting, none of these drivers seemed to notice or care.

I spent several hours staring into the dark that night, trying my best to wrap my mind around the expansive unknown that it embodied. It felt truly incomprehensible. Over the next few weeks, I was inspired to write a musical text that tried to communicate this expanse. The task proved to be quite difficult. After all, how could I write about something that I didn't understand in the slightest?

During this process, I remember having conversations of this nature with friends and acquaintances, and I noticed something interesting. Certain people seemed significantly more receptive to conversations in this vein—that is, conversations that involved pondering the depths of the unknown that accompanied thinking about space and its breadth. It seemed to me like the crux of the issue was in admitting the lack of control that comes with acknowledging the magnitude of our brevity in comparison to the vastness that looms right above our heads. The more conversations I had like this, the more I started to feel like the sky itself was a presence in my life—that it had its own magnetism, even gravity, that called me to look up at it.

All these factors led me towards dialing in the text to the form it is in now. Instead of attempting to write a text that tries to communicate some unknown variable that can't be broached in any sort of measured manner, I decided to write a text that centers on human reactions to the sky. I broke the types of reactions I had observed into two forms: fear-based reactions, and innocence-based reactions. From there, I built two abstract characters around these types of reactions, and created an emotional arc along which these characters were to travel. In conceiving these characters, I decided to avoid specifying their identities beyond any abstract means. This way, I hoped to maintain the universal and ambiguous qualities of the source material that had initially inspired the work.

### *Fire and Water*

The first character—performed by the tenor—is a fiery, masculine individual that feels threatened by the unknown qualities of the expanse. There is a militaristic quality to the writing in his first appearance, as the character stands off directly with the yawning night sky. This character has a resistance to letting the unknown and the inconceivable into their

worldview, fearing what might happen to their identity if they let it in. As such, the tenor, referred to simply as “Fire,” stands at odds with the universe; opting instead to enforce his own ‘reality’ as truth.

I decided to use three toms and a bass drum in the percussion to access some of the militaristic implications that I was imagining for Fire’s personality. In the double bass, I decided that it would be compelling to employ false harmonics—a timbre which can lend itself well to sounding one dimensional—to highlight the hollowness of Fire’s words. As the character’s text leads him to become more anxiously driven, I wrote slurred string crossings that bordered on double stops which sat on tight, dissonant intervals. In the percussion, the busyness of fills and pickups is increased to add to this anxious energy.

By contrast to Fire, the mezzo-soprano’s character, referred to as “Water,” maintains a more naïve and fluid perspective. This character refers obsessively to their mother and father as they look up at the sky with wonder and inspiration. I took heavy inspiration from Laurie Anderson in this part of the text<sup>1</sup>. In her song “O Superman,” the speaker references their mother and father relentlessly—it is not until an inversion of meaning in the middle of the song that the audience realizes the terms “Mom and Dad” are being used in an abstract sense. Mother nature is implied heavily, and the juxtaposition of the speaker’s “Mom” and the petrochemical, military, and electronic arms with which she holds her child was especially poignant to me. I wanted to channel a similar aesthetic through Water’s half of the text. Although there is an innocence implied by talking directly about her maternal and paternal figures, I wanted to create a metaphorical double meaning that underpinned the mezzo’s part as well.

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<sup>1</sup> Laurie Anderson, “O Superman.”

While Water does not have the rigid views that Fire holds, she instead weaves everything into a narrative to try to make sense of the unknown. In the text, I made a clear juxtaposition between Fire's fear not to be swept away from his reality—while Water hopes to be swept away and left without herself. There is simultaneously a relentless hopefulness and hopelessness to her character. Like Fire, she represents a complete contradiction to herself.

In scene three, water is introduced over a distinctly tranquil accompaniment line. There is a peacefulness to this music, and a parental security that is provided by the doubling of the mezzo-soprano's pitches in the bowed vibraphone. In the electronics, the piece employs its first use of a vocoder to support the more direct connection that Water's character has with the cosmos. Before long, the vocoder is replaced by an ordinary synthesizer I measure 147, and this soft electronic bed is maintained through scene four.

At rehearsal H, the percussion employs a kalimba with vibrational pickup. To me, the kalimba has a childlike quality (akin to a toy piano) that supported the character's reference to her mother and father. The kalimba is routed through an electronic plugin called "Andromeda Delay." This plugin is from a reverb software called "Valhalla," and it creates a unique effect in the kalimba. While most delays operate like reverb in the sense that they operate along an axis of general decay, the Andromeda Delay obscures the origin note—instead making the delay happen within a hairpin dynamic. This creates a swelling, almost rocking effect anytime a note is played on the kalimba.

### *Earth, Wind, and the Cosmos*

While I have talked a lot about the Tenor and Mezzo-Soprano, and how I related them to the elements of Fire and Water, I also wanted to create a background narrative that mirrored and supported these two characters with the elements of earth and wind. These two elements are represented by the percussion and double bass, respectively. Like Fire and Water, these two characters are simultaneously complimentary and at odds with one another. I imagined the percussion part to be grounded and more obstinate in its musical and extramusical qualities, while the double bass part is reactive and fluid, fitting itself to whatever musical occurrence transpires around it. As such, I conceptualized these two instruments as characters named Earth and Wind, respectively.

As integral as these two additional characters are, there exists a fifth and final character which is even more constant and foundational than the others: the Cosmos, represented by the electronics. There are two components to this character which influence the way it interacts with the other parts and narrative. The first element is the electronics' chaotic and gargantuan nature—represented most clearly in the prelude and interlude in scenes one and four. More fundamentally (and invisibly), is the relationship with time that the electronics silently impose on the performers. A click track is used for most of the piece to keep all the musicians connected to the material being played in the electronics. However, this click track is occasionally turned off—instead requiring the performers to look at a master clock and align their musical moments with time stamps in the score and on a physical clock on stage. The moments that the Cosmos and the electronics come into the foreground are typically characterized by movement into this aleatoric space, and I decided that this would be an interesting extramusical tool to indicate the ungrounding, ambiguous

nature of this fifth character. The prelude, interlude, and end of scene V are all examples of these ungrounded moments.

*Where the Earth and the Horizon Meet*

Once Water's introduction ends, and Arkhē has its first full silence of the entire piece, the music arrives at a markedly different sound world. The fourth scene—an interlude to the vocal music that permeates most of the rest of the work—is one of the big sections in which the perceived background characters (Earth, Wind, and the Cosmos) of the work emerge into the foreground for an extended dialogue.

I thought that the image of a dialog between the earth and the heavens happening at the horizon was a powerful image, so I decided to write a solo/duo moment for multi-percussion and electronics. In this section, the audience and performers are untethered from both the click track and any sort of clear tonality. I wanted the electronics to have a frenetic, spacefaring quality to them. To do this, I used an analog synthesizer made by Dave Smith Instruments appropriately called *The Prophet '08*, as well as heavy granulation in the electronics. *The Prophet*—which is a singularly powerful instrument and musical tool, provided many of the harmonic whistling sounds that can be heard in this interlude. I wanted the music to feel overly stimulating and overwhelming, and an analog synthesizer gave me so much latitude to achieve this sound world.

The granulation that was employed is a plugin that was created using a Max for Live plugin. Max for Live is a software tool that allows for communication between Ableton Live (the primary DAW that I used to compose Arkhē) and Max MSP (an open-source software that allows users to program sounds and patches from almost their most fundamental components). This Granulator provided an amazing component to this section, allowing me

to foreshadow the big synth arrival that occurs at scene v using automated grains. After taking the synth audio from the arrival at scene five, I was able to plug this audio into the granulator, which chopped the sample into these miniscule pieces referred to as ‘grains.’ Then, over the course of the interlude, the size of these grains was automated to become progressively bigger and more recognizable. This gives the effect of foreshadowing scene v, but also creates a feeling of the electronic part coming into focus or getting closer.

The percussion part fits into the frenetic soundscape provided by the electronics using moderately improvisatory gestures and flurries within the multi-percussion. These flurries get more frequent and constant as the interlude continues, leading into the downbeat of measure 228. While the double bass does not play for the first part of the interlude, it comes in about a minute before the arrival of scene v to pierce through the electronic mass and give direction into scene five.

### *Elemental Communion*

While the beginning of Arkhē finds both Fire and Water amid their original frames of mind, these two characters have their views upended and flipped over the course of the 8 scenes—each ultimately landing in a state of enlightenment through their individual processes of communion with the unknown. This huge internal transition is depicted in scene five—*Elemental Communion*. In this scene, the two characters are put in direct juxtaposition. While they never directly address one another, Fire and Water’s words are put in direct contrast to one another, creating new meaning that could not be gleaned from one part alone. The arc of this scene is such that throughout it, the two halves of the texts start to have progressively more composite meaning. This is not made overtly evident to the

audience until around measure 311, when the interplay between the Tenor and Mezzo's individual texts starts to form complete composite thoughts:

Ex: *"I play God... an illusion"* (page 48)

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*"a cold measured calculation of how the cosmos spins...  
even if it's just an illusion."* (page 50)

Throughout this section, there occurs both a codification of each character's individual perspective, and a development of a new theme that emerges from the combination of their words: synthesis. Fire is fixated with the ideas of worth and remembrance, while Water is enamored with nostalgia, and with remembering the illusory fragments of narrative and memory that make up her perspective and identity. Before the arrival of scene six at measure 361, the two characters cycle through the words *"[worth] remembering an illusion."* The text sits on these words for an elongated period, as the tenor insistently brings the worthiness of the mezzo's cycle of remembering illusions into question. As the sequence progresses, the emphasis of this phrase is gradually shifted, until the arrival of scene six marks a huge shift in the composite statement that is being made: an illusion worth remembering.

The moments before scene six mark quite possibly the most ambiguous and sonically uncomfortable moment of the work. In the electronics, a mass of monotonous, frenetic sound is accumulated to underpin the repeated vocal text. Even more than the interlude, I wanted the music to feel like it crossed just over the line into the grotesque before the moment of clarity that arrives at scene six. Behind the curtain, this electronic storm is being silently routed into an effect chain:

*Delay → Pitch Shift → Delay, with no decay*

This chain is disabled until the arrival of scene six, where it is automated on and releases the accumulated energy that was put into it. This sound mass is then bounced in stereo and automated on and off to operate in counterpoint to the soaring material that is happening in the foreground.

*An Illusion Worth Remembering*

If there are four words which could be used to describe the philosophical underpinning of Arkhē's text, they would be found in this phrase. In this moment of arrival, the two individuals' texts in direct juxtaposition reveal a fundamental truth that I arrived at through the composition of this piece: while these two characters are fundamentally at odds in terms of philosophy and isolated meaning, they each hold a fraction of the greater meaning of their world at large.

This moment is the climax of the entire piece, so I strived to write material that soared out of the chaos leading into scene six. There is a relentless 16<sup>th</sup> note pulse in the analog synthesizer that pushes the music forward, and the vibraphone fits itself into this texture to create more sound and musical direction. The double bass harmonizes with the mezzo-soprano, until it starts to play a line that resembles a walking bass— moving forward and through akin to the vibraphone. The music sits in this until measure 378, where a small but important shift occurs. The vocal lines, which have been repeating the same words ad nauseum, shift to an accompaniment role as Earth and Wind come back into the foreground.

In this duo moment between Earth and Wind, it felt important to write something challenging and virtuosic that matched the energy of the text and musical meaning that had

just occurred. I took inspiration from Edgar Meyer's writing for double bass, specifically from his piece *The Great Green Sea Snake*<sup>2</sup>. This piece has always felt both primordial and virtuosic to me, and it uses some of the harmonic organization tools that I use throughout this piece. Like Meyer, I used the octatonic scale in the higher range of the bass, and it operates in dialogue with the vibraphone playing complementary lines. This section is meant to signify the passing of time and is used as a narrative tool to move Fire and Water's characters to the end of their arcs—which come to a close in the final moments of their lives.

### *Water's Lament*

At first glance, scene seven finds Water saying very similar words to the beginning of the piece. With a metric modulation, Water's part comes back verbatim to how it started in scene three, albeit with a completely different timbral and textural context. Despite similarities, it becomes clear quickly that Water's words ring differently at the end of her life. Instead of a tone of hopeful nostalgia, Water demonstrates a feeling of painful regret. Specifically, regret that she did not live more in the bodily, physical world. In the end of her arc, the mezzo-soprano's character releases her chokehold on the narrative that she has used throughout the text to escape herself. Instead of passing under the guise of some grand narrative or tale, she dies with the sensations of her body drifting away—her heartbeat, her breath, and the bed on which she lies.

In the other parts, this feeling of bodily hyperawareness is supported in all three other characters. In the electronics, an air-pressure sound sits under the vocals, ebbing and flowing slowly. Over the course of the scene, this electronic sound descends, as if the listener is going further underwater. The double bass floats around the vocal line and is intended to have a

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<sup>2</sup> Edgar Meyer, "Great Green Sea Snake."

breath-like quality. Finally, the vibraphone comes in at measure 452 with a static quarter note pulse as the mezzo transitions to experiencing her bodily sensations.

For this percussion part, I took direct inspiration from Tchaikovsky's Symphony No. 6, "*Pathétique*."<sup>3</sup> At the end of the final movement of this work, Tchaikovsky uses the double bass section to create an intermittently pulsing pizzicato texture that rests under the other instruments. Like a heartbeat petering off, these plucked notes are some of the last things the audience hears, as it is intended to evoke the final moments of bodily function. In this piece, I wanted to honor that powerful musical moment in Tchaikovsky's sixth Symphony that has stuck with me for so many years. However, unlike Tchaikovsky's sixth symphony, this characteristic is reflected in the percussion instead of the double bass.

### *Soliloquy of Fire*

The final scene of Arkhē is the return of Fire and marks the end of his life as well. I employed extensively modal sounds here and leaned into uncommon time signatures to create a sense of instability for the vocal line. Like with Water, Fire's text returns verbatim at first, though it soon becomes clear that this iteration has a more reflective and somber tone. Fire's character concludes the piece without any other performers—instead, only the electronics accompany the tenor vocalist here. There is a profound loneliness to Fire's character that I wanted to highlight by having the other performers drop out.

True to his elemental association, Fire's character is one which consumes nearly everything in its path. This is ultimately unsustainable, and leaves Fire alone and without recourse at the end of his life. All that is left for this character to do is relax and embrace

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<sup>3</sup> Pyotr Ilyich Tchaikovsky, "Symphony No. 6, *Pathétique*."

whatever change of form exists for him on the horizon. The piece ends with the tenor speaking the final stanza of the text, with only an electronic drone beneath him.

*“I release myself.*

*Beholding the cosmos for the first time.*

*Infinity.*

*It takes my breath away.”*

*Arkhē*

There is an inherently tragic arc to the characters of both Fire and Water. However, I don't consider Arkhē itself to be a tragedy in all senses. It is a piece that is fundamentally about the cyclic nature of the universe, and of the nature with which we commune with it. While Water starts the work in a place of wonder and innocence, her story ends in fear and an awareness of bodily tangibility. Fire begins Arkhē in a place of fear and mortal awareness, but in his last moments, embraces change and wonder of what his next form could be.

When I think back on that inspiring experience on the hot, balmy summer evening at my father's home in Houston, I can't help but wonder if I shouldn't have been asking myself a different question...

*Have we been here before?*