

The late Edward T. Cone once likened the process of hearing music to that of reading a detective story, in which each subsequent reading induces the reader to consciously “forget” any prior knowledge of a character’s treachery or an object’s pivotal significance.¹ According to Cone, a great musical work similarly commands and rewards our continued attention by asking us, its listeners, to straddle some divide between what we know and what we don’t each time its narrative unfolds anew. I propose that this holds just as true for the composer: while the underlying coherence of such music requires keen insight and objective analysis, the ability to enthrall an audience will always rely to some degree on the unfathomable mysteries of beauty. As a theorist and composer in constant pursuit of daring new structures for musical narratives, I believe it is this conviction, along with the desire to forge a navigable path between the known and unknown, that continues to inform my growth and musical interests.

As a child, I studied piano and violin under the Suzuki method, which nurtured my taste for musical performance yet offered me no theoretical explanation for the pieces being played. As a result, I did not view music as a serious intellectual pursuit and instead enrolled at UC Berkeley as a Bioengineering major, reflecting my lifelong fascination with the practical application of scientific inquiry. In time, however, I felt a longing to explore more ineffable truths, and switched my major to Religious Studies. This decision proved no frivolous lark; my ears were suddenly exposed to a new and diverse body of music. Learning to speak Hindi-Urdu introduced me to the Indian devotional music of *bhajan* and *qawwali*, for example, while my research in shamanism inspired me to learn Tuvan throat-singing.

These world influences, along with other folk genres such as polka and bluegrass, wended their way into the many songs I wrote and performed as the singer and guitarist of an indie rock band. Still, my devotion to science and mathematics never fell behind, made manifest in psychoacoustic recording experiments such as Shepard tones. Meanwhile, I was convinced then, as I remain today, that music history has barely scratched the surface of all the different possibilities for innovative narrative structures. An example of my own undertaking is doublespeaker rhyme, in which two sets of lyrics that rhyme syllable for syllable are panned hard between stereo speakers, akin to a split screen in cinema. This technique can be rather time-consuming, as even a single stanza might easily require a week’s worth of uninterrupted thought. Yet, although the intense commitment and self-discipline needed to implement such ideas beyond their inception felt personally rewarding, my efforts received scant attention within the indie rock community.

With no forum to receive constructive criticism, I wrote and self-published *The Bobtail Method* (http://bobtailyearlings.com/docs/Bobtail_method.pdf), a hundred-page lesson plan based on my idiosyncratic method of songwriting, fulfilling the notion that a musician disposed to invention will naturally have one foot planted in pedagogy as well. I then enrolled in the Master’s program for Music Composition at Hunter College, where I learned the idioms and forms of Western art music while immersing myself in the recent music theory literature. In particular, the works of Douthett, Cohn, Callender, Quinn, Tymoczko and others hint at exciting new developments in the models they propose for parsimonious voice-leading. Because these geometric models link related chords together in an abstract physical dimension, I believe they may also serve as templates for compositional designs set in a virtual physical

¹ Edward T. Cone, “Three Ways of Reading a Detective Story—Or a Brahms Intermezzo,” ed. Robert P. Morgan, *Music: A View from Delft* (University of Chicago Press, 1989): 77-93.

dimension. A single musical work based on such a design will then encompass multiple or even infinite narratives, based on each individual listener's unique location or path of movement within a virtual room.

For my dissertation, I plan to investigate the cross-pollination of geometric voice-leading spaces with composition in virtual realms, thus tying all my divergent passions together into a single ambition. As a composer and inventor, I am awed by the vast, uncharted territory of musical narratives awaiting discovery; as a theorist and pedagogue, I am eager to begin systematically examining, evaluating, and explaining the results. Thus, my doctoral research will follow a four-pronged trajectory:

Tonal and Post-Tonal Composition – A major impetus behind my interest in virtual realms is to compose works that sound, as Tymoczko puts it, “both tonal and modern.” At the same time, geometric models readily lend themselves to post-tonal interpretation. I hope to develop a compositional voice that seamlessly weaves the two approaches while steadily building up a repertoire that helps sharpen and solidify my ideas.

Transformational Theory and Mathematics – My understanding of geometric models will require greater familiarity with the writings of David Lewin and others, as well as some advanced mathematics. As an undergraduate, I have taken courses in linear algebra and multivariable calculus. I am currently studying group theory on my own, and plan to expand my knowledge of abstract algebra and topology in the near future.

Music Analysis – A prescriptive and unified theory for composing effective musical narratives in virtual realms will not arise from scratch, but rather, from a traditional foundation of harmony, counterpoint, and form. Thus, my research will be supplemented with a consistent regimen of analyzing familiar works in the classical and pop/rock repertoire, along with steady attendance and paper presentation at academic conferences.

Computer Programming and Audio Recording – While live performance is possible, more likely these works will require the listener to wear headphones and navigate around a virtual room using motion sensors or a graphical user interface. Programming such capabilities will require me to learn Max/MSP, while greater familiarity with digital audio software and studio techniques will facilitate my recording of the audio tracks.

Beyond aiding my research, a doctorate in Music Composition from Princeton would make me a strong candidate for a tenure-track position, allowing me to pass on the knowledge that has inspired my musical growth while surrounding me with intellectual peers who will continue to challenge my ideas and work as a composer and theorist.