Music and Technology: A Very Short Introduction

I am applying for an IAH fellowship with the intention that, if awarded, I would complete a significant amount of what will be my fourth book, *Music and Technology*. Recently commissioned by Oxford University Press for its acclaimed *Very Short Introductions* series, *Music and Technology* is intended to be an accessible but rigorous study of value to general readers, students, and scholars.

I have been studying music and technology for nearly twenty years. My work began with an undergraduate honors thesis, which led to my dissertation, "The Phonograph Effect," in 1999; my first book, *Capturing Sound: How Technology had Changed Music*, was published in 2004 and recently appeared (in September 2010) in an expanded second edition. I am co-editor of *Music, Sound, and Technology in America: A Documentary History* and author of chapters for the *Oxford Handbook of Sound Studies* and the *Oxford Handbook of the History of Technology*. In 2009 and 2010 I planned and oversaw a symposium on music and technology for the IAH's CHAT festival that explored on the figure of the disc jockey (DJ) through lectures and performances. I am also currently finishing a book for Oxford called *Groove Music: The Art and Culture of the Hip-Hop DJ*, which focuses on the use of turntable technology as a musical instrument. *Music and Technology*, therefore, will be the mature product of many years of research and writing.

The book will have nine chapters, the first and last acting as introduction and conclusion:

Chapter 1: Music as Technology

Chapter 2: Instruments

Chapter 3: Music Printing

Chapter 4: Automata and Mechanical Players

Chapter 5: Sound Recording

Chapter 6: Radio

Chapter 7: Music in Cyberspace

Chapter 8: Games and Gadgets Chapter 9: Technology *as* Music

The first chapter will make the point—reinforced in every subsequent chapter—that technology does not stand apart from music, acting on it as an outside force, but has always and will ever be a part of music. In other words, all musical decisions, activities, and experiences are in some way informed by technological considerations. Chapters 2 through 8 each focus on a different type of music technology, and are arranged in a chronological (though overlapping) manner. The second chapter starts at the dawn of music with the very first human-made instruments; although it will provide a brief historical sketch, the main point will be to explore the notion of instrumentality—the process by which objects become and are understood as musical instruments. The third chapter starts in the 15th century with the emergence of music printing and will consider the changes in music composition, performance, and reception wrought by printing over the subsequent centuries. Chapter 4 will survey the curious history of musical automata, from mechanical birds and singing statues to the Zenph re-performing piano recently developed in nearby Raleigh. The middle chapter focuses on the subject of my scholarly expertise: sound recording. In it I will explain my concept of phonograph effects, which I define as changes in musical behavior (listening, performing, or composing) that have arisen from users' interactions with recording technology. A simple example is the three-minute pop song, understandable as a response on the part of songwriters to the time limitation of early recording media—three minutes being the capacity of the 10-inch 78 rpm record and later the 7inch 45. Chapter 6 will consider radio, in particular the cultural impact of a technology that fosters what has been called imagined communities through the simultaneous experience of music by far-flung listeners. The next chapter tackles the controversial subject of music downloading and examines virtual music communities made possible by Internet connectivity.

Chapter 8 is situated wholly in the 21st century and explores the explosion of interactive music video games such as *Guitar Hero, Rock Band*, and *DJ Hero*. The final chapter investigates how once non-musical technologies (telephones, typewriters, computer printers, car horns, etc.) have been appropriated as or transformed into musical instruments. This chapter will also act as a conclusion by reinforcing the point of the inextricability of music and technology, this time from a modern perspective.

Although each of these chapters has a distinct focus, several common themes will recur throughout the book. One—the inextricability of music and technology—I have already mentioned. A second and related concept is that technology has an unavoidable impact on the music used to create and disseminate it. A third crucial theme concerns the central role of users (as distinct from inventors). Listeners, performers, and composers are not helpless subjects of technological influence. Rather, as I will constantly remind readers, music and technology are co-constructed; that is, users shape the design and function of technology just as the design and function of these technologies shape their use.

I plan to start working on this book in the fall of 2011. The chapters on subjects I have already researched for many years will come quickly. However, several of the chapter topics (for example, automata and radio) are relatively new to me and will require further research. The introduction and conclusion will, as is typical for me, come last. I project that I will be able to complete this book over the course of the 2011-2012 academic year plus the summer of 2012.

An IAH fellowship in either fall 2011 or spring 2012 would be extremely valuable for two reasons. First, it would allow me to research and write on a daily basis for an extended period. After writing nearly 200 pages during the summer of 2010 (and doing little else), I have come to the conclusion that, for me, the single best contributor to the success of a project is

momentum, the progressive development of a project that arises from continuous attention. Just as crucial is that an IAH fellowship would afford me the opportunity to interact with smart, interesting people from many different fields. As a naturally curious person who thinks that a Ph.D. is no excuse to cut short an education, I would benefit greatly from being introduced to new perspectives, methodologies, and literature. My subject is especially amenable to an interdisciplinary setting, given how often the issue of technology comes to bear on scholarly endeavors of the most disparate origins. In fact, I believe that any cross section of UNC colleagues would have the potential to shape my book in the most positive ways. I would also work to return the favor, listening with an open mind and offering myself as a sounding board. Given my project's engagement with issues of deep interest among the spectrum of scholars, the IAH seems an ideal place to pursue this study.

I have spent a good amount of time in Hyde Hall, having participated in many IAH events over the past few years. I often look at the impressive display of books by IAH fellows, and am quite sure that every book on those shelves is stronger for having been exposed to the rich atmosphere of the Institute during its development. I would be delighted to have the opportunity to contribute my own volume to those shelves.

Thank you for your consideration.

Circulating the Romance: Global Gendered Fantasies

An IAH Faculty Fellowship would provide necessary leave time to complete the preliminary draft of a book length manuscript tentatively titled *Circulating Romance: Global Gendered Fantasies* on romance as an object of study that is emblematic of the global circulation of raced, classed, and gendered practices. It builds on, and extends, the work on the genre of romance introduced by Janice Radway and Tania Modeleski in the 1980s. In *Loving with a Vengeance*, first published in 1982, Modeleski looks at romance novels, soap operas, and gothic novels as an overlooked genre that says much about the conditions of women's lives in the United States. Responding to critiques of low culture, as well as feminist dismissal of the genre (at that time), Modeleski contends that these narratives act as a form of empowerment and as a coping mechanism for consumers. Similarly, *Reading the Romance* published in 1984 by Radway, through ethnography and feminist psychology, contends that romance novels are both an escape from, and a protest of, the tedium of daily caretaking placed on women as wives and mothers, and the ridiculing of their reading choices by men.

Foregrounded by the work of both Modeleski and Radway, this multi-site project maps the transnational relationships of exchange that surround the romance novel by asking how the genre of romance is circulated; interrogating how this gendered fantasy becomes a *global* concept. In the book, I interrogate this concept of 'the global' through three broad areas: production, consumption and translation. First, I map the circulation of the books themselves, as a formalized production of romance. For example Harlequin Mills and Boons Ltd.—one of the largest publishers of romance novels founded in Britain as Mills and Boon, but then later acquired by Canadian company Harlequin Enterprises—

releases an average of 100 titles a month, and in 2011 collected approximately \$500 million dollars in global sales. The books are published in 30 languages in over 100 countries, where carefully researched markets open up regularly for the formulaic feisty-heroine/autocratic hero narratives that make up these gendered fantasies. Such a global circulation, and the corresponding popularity of this <u>singular</u> narrative, is the focus of the first part of the book.

In the second part of the book, the focus shifts to the global consumption through a localized ethnography—of the books themselves. The primary location of this analysis is Colombo, Sri Lanka, a former British colony, where the popularity of the books have resulted in formal and informal networks of exchange. These exchanges exemplify the nuanced gendered and classed disparities that result from chronic colonization (Sri Lanka was colonized by the Portuguese, the Dutch, and most recently by the British) and its continued influence on identity formation. In Colombo, informal female networks, made up of friends, family members, and co-workers, regularly exchange the books as a form of communal book sharing. They discuss authors, and plotlines, and know each other's preferences. In addition to this informal exchange, a more formal exchange happens through a chain of second hand bookstores in Maradana, an industrial suburb in Colombo, which allows you to buy or borrow books. Amongst the women who purchase and exchange the book, the Maradana booksellers have become an institution. Less than two decades ago, they were hastily constructed pellet structures of about three stores. Now some are built as more semi-permanent structures, and the shops have grown to approximately eight. The bookstores act as points of sale, but also as lending libraries where books can be returned and re-circulated. Because of this, the

booksellers have become romance 'authorities' of sorts, with many of the female consumers relying on them for advice on what is newly arrived, and what authors are currently available. Long time patrons have their favorite lenders who will recommend particular authors based on their knowledge of what the patron enjoys. Such an exchange of intimacy *about* intimacy is the intersection of several contemporary and historical conditions of classed and gendered identities, which are examined throughout this section.

In the third section of the book, I look at the concept translation, through the lens of post-colonialism. Since 2008, Harlequin Mills Boon Ltd. set up a publishing house in India and released three romance novels in English by Indian authors. The enormous success of these books led the company, in July 2012, to announce that they would translate some of the more popular English novels (by Western based authors) to Hindi, Malayalam and Tamil. As part of this translation, while retaining the same exact narrative structure and plotline, the names of the hero and heroine will be changed to Indian names, and would be locally based. The final section of *Circulating the Romance* discusses the implications of such translations, while also engaging with the reasons for their success. This includes questioning the relationship between colonialism and contemporary global commodity exchanges that are closely intertwined with issues of racial hierarchies, class privilege, and gendered identity.

In order to comprehensively and cohesively engage with the topic, this research employs a combination of ethnography and textual analysis. To this end, preliminary interviews with romance novel readers in Sri Lanka were completed in December 2010 with follow-up interviews scheduled for December 2012. The 2012 interviews will also include the booksellers from Maradana. The intent of these open-ended

interviews/conversations is to gain an understanding of how each of the constituents in this exchange of romance view it, both as an object and as a concept. In addition, in Spring of 2013, I plan to put together a comprehensive archive of related documents such as press releases and advertisements for the various books, in various countries including the aforementioned releases in India. This work will be take place concurrent to an extended literature review that connects cultural, post-colonial, and critical race theories of identity and transnational exchange to the genre of romance.

Such a collection of research and documentation in Spring 2013 will provide a strong foundation for completing a draft of the book manuscript during the 2013-2014 academic year.

Lee Weisert - Murmuration CD Project

Music is a language, but it is also a physical experience. Sound is a vibration in which we are literally immersed; a stimulus to which we have direct biological responses. As a composer and sound artist, I am interested in creating musical works that highlight the interplay between the physicality of sound and the psychology of listening. The work that I propose completing during an IAH fellowship will explore this tension in order to create original and unpredictable musical experiences.

If accepted, I plan to use my IAH fellowship to complete work on *Murmuration*, my second full-length CD of original compositions. This will involve finalizing the recording and editing of five pieces that are in various stages of completion (*Replika*, *Polychoron*, *An Album of Fluid Motion*, *The Dante Quartet*, and *Sonolumen*), as well as composing and recording *Clinamina*, a new large-scale composition which will form the centerpiece of the album. *Clinamina* will be my longest composition to date, representing a culmination of many of the themes and techniques that I have been interested in over the past several years. The *Murmuration* CD as a whole will include approximately one hour of original music, including both electronic and acoustic works, performed by local and national performers. I have received an expression of interest for publication of the CD from New Focus Records, a prominent new music record label that also published my first CD project.

My first CD, *Wild Arc*, published in 2012, features a wide range of sound sources and compositional approaches, including works for traditional concert instruments, computergenerated sounds, field recordings, and hybrid acoustic/electronic pieces. The central theme is one of experimentation and discovery. Each work seeks to explore a central conceit to its fullest,

whether it is orchestrating the frequency content of a Burmese prayer bell, rewiring electronic children's toys, or the cataloging the expansive sonic range of glass objects.

Since the creation of that CD, my compositional interests have distilled into a more clearly-defined and personal aesthetic project, the pursuit of which I find increasingly exciting with each new piece. This project is characterized by a tension between my affinity for experimental strategies of composers such as John Cage—who famously used chance procedures to determine pitches and rhythms—and my somewhat contrasting predilection for more traditional, expressive musical materials. I am fascinated by the co-existence of so-called "external" decision-making strategies (rolling dice, sonifying mathematical formulae, etc.) with "internal" elements of memory, expectation, emotion, and drama. On what level, or at what point, can we differentiate between these two methods of musical organization? The abstract nature of music makes it a particularly compelling medium for exploring the overlaps and relationships between conscious and unconscious domains.

Combining these two approaches (i.e., the "external" and "internal" organizational models) is both an artistic and a logistical challenge. My recent approach has been to combine algorithmic models on the structural level while reserving intuitive decision-making for the local-level, or "surface," elements. For example, a mathematical sequence will determine which instruments will be heard a particular point in the piece, but I will creatively determine what the instrument is playing. Like an evolutionary model for musical development, musical materials are moving, reacting, and striving with/against each other in an environment of randomness and complexity. Some of the compositions on my first CD that most clearly demonstrate this approach are *Shirt of Noise*, *Wild Arc*, and *Étude Géologique*. In these pieces, rapid-fire

sequences of collisions and contrasts pull the listener along. Meanwhile, the illusion of largescale development is gradually called into question.

Murmuration will expand upon this approach in several different ways. The piece *Polychoron*, for example, extends these musical sequences into a three-dimensional space, with the players spaced far apart and recorded in surround-sound. *The Dante Quartet* uses two state-of-the-art computer-controlled pianos, capable of playing at a humanly-impossible 24 notes per second. At this speed, gestural events operate in a completely different perceptual space, overwhelming our biological capacity to absorb the information. Tweaking these base-level parameters has forced me to think in new ways about how music can be organized.

What excites me most regarding my proposed project is the prospect of applying the ideas and techniques described above to a work of significantly longer duration than I have previously attempted in *Clinamina*. If successful, this approach could potentially develop into a new hybrid form of ambient (or soundscape) composition and traditional techniques of narrative development. One can envision an hour-long musical composition which survives purely as a gigantic sequence of novel sonic and gestural contrasts, a never-ending thread by whose length alone would force a poetic and individually-conceived reinterpretation of the journey. Though I always hesitate to make such claims, I am not aware of a work yet that combines these two approaches to such as degree as I envision for this project.

An IAH fellowship will be invaluable for the completion of *Murmuration*, and, indeed, comes at a crucial phase in the process. With several of the shorter pieces already underway, I would be able to dedicate at least six hours a day to *Clinamina*—a level of sustained creative momentum that is as rare as it is essential for such a project. I am equally excited by the potential for cross-disciplinary conversation, which has long been a source of inspiration in my music. In

the past, I have collaborated with scientists, mathematicians, computer programmers, visual artists, dancers, and poets on compositions and performances. My sound installation work in particular—including an in-progress installation for the newly-renovated Hyde Hall fountain—has long been a platform for exploring concepts from the physical and natural sciences as musical sources. My recent focus on the philosophical and psychological implications of music composition suggests that this is an ideal time for me to participate in an extended conversation with colleagues in these and other areas of the humanities.

I am confident that by the end of the fellowship period I will be in the finishing stages of the publication process. A fully-realized twenty-minute composition should take about three months of uninterrupted work from start to finish. The remaining month of the semester and the adjoining summer break will be dedicated to editing and finalizing the individual recordings.

After the composition and editing phase of *Murmuration* is complete, I will work with a professional recording label to complete the final tasks of creating the graphic design and having the recordings professionally mastered, with a projected completion date of fall 2020.

As a recently-tenured faculty member at UNC, I appreciate and intend to take advantage of the opportunity that tenure provides for taking significant risks in developing one's work. The effects of the pre-tenure process are most visible in the desire to create numerous works and performances of works, which tends to dissuade one from embarking on overly resource-intensive projects. Fortunately, in my case, I found this to be more beneficial than restrictive, in that it forced me develop my expressive language and experiment with the creation of diverse musical materials. Now, I feel eager to begin a new stage of artistic development, in which I must stake bold claims not only in the form of individual compositions, but also in my broader artistic vision and purpose. Thank you for your consideration.