Residency at the Institut de Recherche et Coordination Acoustique/Musique: A Research Report

Paris, France (June 1 – July 7, 2017)

The purpose of my residency at the *Institut de Recherche et Coordination Acoustique*/ *Musique* (IRCAM) was threefold: a) to consult sources only available onsite at the center's médiathèque, b) to conduct preliminary interviews with IRCAM researchers involved in software development, and c) to attend lectures, workshops, and concerts presented during IRCAM's annual multidisciplinary festival and academy, Manifeste. These activities were undertaken as part of my dissertation research, which focuses on the role of computer-based models in post-spectral music of the last thirty years. In particular, my dissertation examines the links between software design and compositional practice, adopting an interdisciplinary perspective that frames the relationship between these two activities using methods from music theory, media historiography, and critical organology. Given the close connections between IRCAM and post-spectral music, the center provided an ideal locus for inquiry, and during my residency, I was able to open lines of communication with IRCAM researchers and gather a large volume of source materials that will act as a foundation for my dissertation.

While at IRCAM, I worked under the supervision of Nicolas Donin within the offices of the *Analyse des practiques musicales* research team. For the duration of my stay, I was granted a work space and full access to the local holdings at IRCAM's médiathèque, as well as its extensive online database (which is only accessible from within the physical confines of the médiathèque). The online database, in particular, proved to be a wellspring of sources documenting past concerts, lectures, interviews, and in-house documentaries and reports on the center's research activities. Mining the audio and video archives at IRCAM, I was able to acquire many sources that will be invaluable for completing my dissertation project.

Beyond the médiathèque, I was also granted special permissions to access the Sidney Repository, which houses software patches and technical documentation for almost all of the musical works commissioned by IRCAM over the past forty years. In my dissertation, I will argue for an expanded view of the "musical work" that, in addition to notated scores, encompasses digital traces of the work, such as performance patches, sound files, DAW sessions, OpenMusic "e-sketches," and other artifacts generated during the act of musical creation. These immaterial traces are not always easy to attain and they are often excluded from studies of new music, but they are fundamental to my analytical method and the ability to access them in the Sidney Repository will be a real boon to my research. In effect, it has provided me with half of the documentation I need for my dissertation, the other half being written sketches that I will consult next summer at the Paul Sacher Foundation in Basel, Switzerland. Combining these two halves—digital sketches from IRCAM, written sketches from the Sacher archives—I will be able to gain a more comprehensive perspective on the genesis of musical works that I am analyzing in my dissertation.

To gain insight into software development at IRCAM, my research program entails a certain degree of ethnography, primarily in the form of interviews with software

developers, technical assistants (aka, *rèalisateur d'informatique musicale*, or RIMs), and composers. On this front, I was able to establish communication with several key figures working in these areas at IRCAM; in particular, I had meetings with Jean Bresson (OpenMusic), Norbert Schnell (real-time applications), Mikhail Malt (musical representations team), Philippe Esling (Orchids), Charles Picasso (AudioSculpt), Yan Maresz (composer involved with creation of Orchidée software), Alain Lithaud (AudioSculpt documentation), and Serge Lemouton (RIM and Sidney Repository administrator). These researchers are integral actors within the IRCAM community and their first-hand knowledge of IRCAM software ensures that their insights will be central to my research. Going forward, I intend to maintain contact with these sources, and I have plans to convene with several of them at next year's Manifeste to conduct a second round of interviews.

As an auditor of the Manifeste Academy, I attended many concerts, lectures, and workshops featuring this year's resident composers: Chaya Czernowin, Alberto Posadas, and Toshio Hosokawa. In addition, I was able to witness world premieres of several works by a younger generation of composers, including Mauro Lanza, Ashley Fure, Jérôme Combier, and Julia Blondeau—these artists represent a new wave of talent working at the intersection of acoustic and digital media. Living up to its reputation as a hub of the contemporary arts scene, Manifeste presented a broad cross-section of new music and interdisciplinary mixed media works, showcasing a multi-generational line-up that included established composers, as well as younger, up-and-coming artists. By participating in the Academy, I was able to engage more fully with the composers and their work, and I learned a great deal about the current state of the art for mixed music composition.

Looking ahead, I will spend the next few months organizing and processing the vast trove of source materials I obtained during my residency at IRCAM. Next spring, I will move on to the second phase of my research program, which entails combining my IRCAM findings with information I come across during my residency at the Paul Sacher Foundation (May-June). These two residencies—IRCAM in 2017 and the Sacher Foundation in 2018—will form the core of my research program, and I am very grateful to CIRMMT for helping to make my IRCAM residency a reality through its Inter-Centre Exchange Funding. In sum, my residency at IRCAM hit all of its immediate objectives, and perhaps more importantly, it laid the groundwork for further collaboration as my dissertation continues to take shape over the next two years.