Research Grant – Fall 2014

Faculty member: Ciro Scotto

Unit: School of Music

Project/Proposal Title: *Presentation on the music of Pierre Boulez at the EuroMAC International Conference in Leuven, Belgium*

Abstract:

This grant will fund my travel and presentation expenses for the 2014 international EuroMAC (European Musical Analysis Conference) in Leuven, Belgium. My presentation title "Harmonic Process and Formal Structure in some Recent Music by Boulez was selected from a very high number of extremely competitive proposals. EuroMAC only takes place every three to four years, so being selected to present is a very high honor. Eight European music theory societies sponsor EuroMAC, and presenters from twenty-nine different countries attended. Moreover, the conference provides presenters the opportunity to have their work seen by top scholars from around the world.

Proposal:

Pierre Boulez is a world-renowned French avant-garde composer that rose to prominence in the 1950s. Although his early works are rooted in the Viennese school of serialism established by Schoenberg, he extended serial techniques to other dimension, such as rhythm, creating total serialism. He also invented a new method of organizing a composition's pitch-class material called pitch-class multiplication. My paper models the harmonic process and formal structure of two relatively recent works by Boulez, *incises* (1994, 2001) and *sur incises* (1996, 1998) and compares their structure to the serial and pitch-class multiplication techniques of earlier works, such as *Le marteau sans maître* (1954). While the theoretical literature modeling the serial processes in the early works provides some insight into their harmonic and formal structures, very little has been written about recent compositions. Boulez appears to abandon the technique of pitch-class multiplication for generating pitch-class sets and the serial techniques that structured his early works in favor of a more gestural and controlled chance technique in the later works.

My recent publication in *Perspectives of New Music* vol. 52 no. 1 ("Reexamining PC-Set Multiplication, Complex Multiplication, and Transpositional Combination to Determine Their Formal and Functional Equivalence"), however, demonstrates the formal and functional equivalence of pitch-class multiplication and transpositional combination. Moreover, my work connects Boulez's earliest serial works and to his most recent works through transpositional combination, an operation that generates pitch-class sets. Consequently, transpositional combination generates the domains and serial structures of *Le marteau sans maître*, and it generates many of the harmonic pitch-class structures in *Sur incises*. In the earlier works, transpositional combination and Boulez's unique serial structures create a compositional space, a structured topology of pitch-class sets that provides a logical global framework for the progression of domain pitch-class sets. My current paper greatly extends the work in my article. For example, I demonstrate that in *sur incises* Boulez uses transpositional combination to create structures called hexachordal chains. All the hexachords in a chain share a common pentachord as a subset. Consequently, the whole hexachordal system is analogous to the tonal system of keys. Moreover, this paper constructs

a new global framework for the later compositions that replaces the serially generated framework with a transformational network of hexachordal chains generated by transpositional combination. Nevertheless, the latter theoretical construct exhibits many similarities to the earlier serial compositional space, such as a logically constructed global framework that allows for local indeterminacy.

This project fits the goals of my unit, college, and the university because my presentation at the international EuroMAC conference enhances and further establishes USF as an international center for the research and study of contemporary music. The project will be of interest to theorist, mathematicians, musicologist, and music scholars in general, so it is interdisciplinary across musical and non-musical disciplines. As a tenure earning faculty member, the opportunity to present my work at this conference will help establish my international reputation as a leading scholar in the field of contemporary music.