# Steven Holl and Dimitra Tsachrelia (dt22362columbia.edu)

# **ARCHITECTONICS OF MUSIC:** Varèse

"... a theory of music should be reduced to a combination of numbers: it is the 'arithmetic of sound' just as optics is 'the geometry of light." - Claude Debussy

"When I was 20 Höene-Wronsky's definition of music was probably what first started me thinking of music as spatial – as bodies of intelligent sounds moving freely in space..."

- Edgard Varèse

### I. LANGUAGE, LIGHT, STRUCTURE, SCALE AND TECHNIQUE

The initial studies in the studio will focus on experiments in the language of architecture inspired by music. The spatial energy of daylight, a fusion of structure and light and human scale, will be the focus of study models in the 5 week exercise.

Each 2 person team will choose a fragment of music by the composer Edgard Varèse and create rectangular works of a volume 25'x100'x75', initial studies to be at 1/8''=1'-0''. Midterm presentation models to be 1/4'' = 1'-0''.

### **II. VARÈSE CENTER FOR MUSIC AND THE ARTS**

The composer Edgard Varèse, one of the most important and original of modern times, was born in Paris but spent the greater part of his life in New York City. The hypothesis for the project is a patron (like the Stavros Niarchos Foundation) has pledged \$19.5 million to build a center to hold the Varèse Archives, a library, and serve as a catalyst for young emerging composers and artists in all media.

In the 1950's, Varèse was influenced by the New York painters Franz Kline, Willem de Kooning, Robert Motherwell, Jackson Pollock, and Mark Rothko. In turn "...their art aspired to imitate the conditions of music, which they viewed as not imitative of anything but 'absolute,' intimately involved in the manipulation of its own physical medium..." (Malcom MacDonald)

This cross-fertilization of music, painting, sculpture, and architecture is a core aim of our studio.

The site for the Center is to be on the southwest corner of Sullivan and Houston Street, only a block from Varèse's former residence at 188 Sullivan Street.

*This course will be taught with the assistance of composer Raphael Mostel. For the Kinne Trip, students will visit the city of Varèse's birth, Paris.* 

# III. PROGRAM

Site: Corner of Sullivan and Houston Street, NYC

25' x 104' = 2,600 SF x 5 levels = 13,000 SF

Varèse Archives Room	2,000 SF
Street Level Gallery (2 levels)	4,000 SF
250 Seat New Music Hall	+/- 2,500 SF
Green Room and Seating	800 SF
Lobby and Information	500 SF
Administration	
Offices	1,000 SF
Large Conference Room	500 SF
Small Conference Rooms	
2 @ 225 SF each	450 SF
Science and Music Library	2,000 SF
TOTAL	13,750 SF

### **Reading list**

- 1) MacDonald, Malcom. Varèse Astronomer in Sound, Kahn & Averill, 2002
- 2) Stravinsky, Igor. Poetics of Music, in the Form of Six Lessons. Cambridge, Massachusetts and London, England: Harvard University Press, fourteenth printing, 2000.
- 3) Treib, Marc. Space Calculated in Seconds. Princeton University Press, 1996.
- 4) Griffiths, Paul. Modern Music: The Avant Garde Since 1945. George Braziller, 1981.
- 5) Griffiths, Paul. Modern Music: A Concise History. Thames & Hudson, 1994.
- 6) Toshiko, Mori. Immaterial/Ultramaterial. George Braziller, 2002.
- Books in any edition by Merleau Ponty a) Phenomenology of Perception b) The Visible and the
  Invisible c) The Eye and the Mind. (These should all be available via Northwestern University Press).
- 8) Holl, Steven. Parallax, Princeton Architectural Press, 2000.
- 9) Holl, Steven. Scale, Lars Miller, 2011.
- 10) Safont-tria, Jordi; Kwinter, Sanford; Holl, Steven. Steven Holl Color, Light, Time. Lars Miller, 2012.
- 11) Xenakis, Iannis. Formalized Music: Thought and Mathematics in Composition (Harmonologia Series, No 6). Pendragon Press, 1992.
- 12) Xenakis, Iannis. Music and Architecture, trans. by Kanach, Sharon. New York: Pendragon Press, 2008.

All architecture is teamwork. Students will work in teams of 2. Desk crits on Mondays; Studio pin ups on Thursdays 1:30 – 6:30pm Midterm review: Friday, February 23, 2018 - Final review: Tuesday, May 1, 2018

www.architectonicsofmusic.com