Silence itself, in a place of worship, has its music. In cloister or cathedral, space is measured by the ear: the sounds, voices and singing reverberate in an interplay analogous to that between the most basic sounds and tones; analogous also to the interplay set up when a reading voice breathes new life into a written text. Architectural volumes ensure a correlation between the rhythms that they entertain (gaits, ritual gestures, processions, parades, etc.) and their musical resonance. It is in this way, and at this level, in the non-visible, that bodies find one another. – Henri Lefebvre, The Production of Space

Sound is not something merely projected into a space. Space is not merely sound’s container. To the contrary, sound has the potential to define space, to create metaphorical walls. Sound “happens” in space; its waves traverse a distance from source to ear. Furthermore, both sound and space have a structural design, an architectonics. This seminar addresses the sonic qualities of space, the spatial properties of sound, and the myriad other links between space and sound. We will begin by addressing theories of space – particularly those that acknowledge the role of sound, or silence, in shaping and giving character to space. We will then move on to examine some historical examples in which sonic and spatial constructions have worked in concert to define a place in time. The remainder of the semester is devoted to a variety of sound/space applications: artists crafting spaces out of sound, architects creating sonic spaces, sonic landscapes and sculptures, sound in mediated spaces, and auditory media’s role in shaping spaces or demarcating boundaries. Everyone will be asked to complete one mid-semester paper on a topic of his or her choice, and a final group project – either a substantial research paper or a creative project. Throughout the semester, additional assignments will be developed collaboratively between instructors and students. Through the completion of these exercises and weekly reading assignments, weekly attendance, and occasional field trips and guest speakers, students will leave the class familiar with a new body of theory, appreciative of the connections between these seemingly unrelated concepts, and aware of how sound shapes the world we live, and listen, in.

Learning Objectives: By the end of the course, students should be able to:

- Think critically about sound in relation to and separate from imaged and physical space.
- Appreciate the importance of a critical examination of sound to both media studies and spatial design practices.
- Practice interdisciplinary scholarship, and appreciate the special challenges and responsibilities of this work.
- Design a sound-centered historiography of media and spatial design.

TEXTS:
You will be asked to purchase the following from Barnes & Noble (5th Ave / 18th St):

- Gaston Bachelard, The Poetics of Space (Beacon Press, 1994)
Recommended Reading:

- City of Sound ([http://www.cityofsound.com/blog/](http://www.cityofsound.com/blog/))
- Resources here: [http://del.icio.us/Shannon_Mattern/sound_space](http://del.icio.us/Shannon_Mattern/sound_space) and here: [http://www.wordsinspace.net/course_material/sound_space/sound_space_F05.html](http://www.wordsinspace.net/course_material/sound_space/sound_space_F05.html)

Requirements:

Attendance. You will be permitted two excused absences during the semester. Subsequent absences will impact your grade, and more than four absences may prevent you from passing the course.

Participation. Because this class is a seminar, your thoughtful participation is essential to its success. You are encouraged to contribute—courteously and meaningfully—to class discussions. Participation is worth 10% of your final grade.

Mid-semester Essay. The first six classes are dedicated to laying some groundwork for our investigation of sound and space – exploring various theoretical frameworks through which to approach the field, placing our subjects of interest within a historical context, etc. Before we delve into more specific topical issues in the latter half of the course, you can take an opportunity to survey this groundwork by exploring the history, theory, or criticism of space and sound in an eight- to ten-page paper on a topic of your choice. This essay is worth 30% of your grade. Due March 14 @ 4pm. Submit via hard-copy to Barry and via email to Shannon.

Gallery/Event/Site Review. Throughout the semester New York will host several sound-and-space-themed exhibits in its museums and galleries. We’ll keep a running list of relevant exhibits and “sites to see” on a class bulletin board, and we encourage you to visit as many as you can. By the end of the semester, we’d like for you to submit a five- to six-page critique of one of those sites or exhibits. Please describe the site/exhibit, address the key theoretical issues the artist(s)/architect(s) is/are addressing, and assess his/her/their success in grappling with those issues. The review is worth 20% of your grade. Due April 18 @ 4pm. Submit via hard-copy to Barry and via email to Shannon.

Final Project. Throughout the course of the semester, each student will design and execute a project or paper that explores some relationship between space and sound. This research project, which should be presented in a twelve- to fifteen-page paper, or a creative project with a three- to four-page accompanying text, is worth 40% of your grade. Due May 2 @ 4pm.
JAN. 25

INTRODUCTION
- Theodor Adorno, “On Music and Language” In Quasi una Fantasia.

FEB. 1

THRESHHOLDS OF LISTENING
Reading:

Listening:
- Wagner: Tristan und Isolde: Music as Mythic Return.

FEB. 8

LISTENING IN AND AGAINST NATURE
Reading:

Listening:
- Excerpts from Terra Nova: Nature & Culture accompanying CD.

Supplemental:

Supplemental Listening:
- Ancient Greek Music: Nature as Limit
- Bach: Excerpt, Music as Human Nature
- Beethoven: 6th Symphony, Pastorale: Music as Second Nature
- Stravinsky: Le Sacre du Printemps: Return to Ritual Space
- John Cage, Ryoanji, conceptual nature.
FEB. 15  THE POETICS OF SPACE
Reading:

Supplemental:

FEB. 22  LISTENING PLACES
Reading:

Supplemental:

FEB. 29  IDEALISM, ARCHITECTURE, AND SOUND
Readings:

Listening:
• Selections from Bach, Beethoven, Wagner & Bizet TBD

Supplemental:
MAR. 7  NO CLASS: Barry and Shannon at SCMS in Philadelphia
Avery Fisher Hall/ New York Philharmonic Orchestra
1:00PM Pre-concert talk
2:00PM Concert
  o  Haydn: Symphony No. 48, Maria Theresa
  o  Berio: Folk Songs
  o  Beethoven: Symphony No. 4

MAR. 14  SOUND AND ARCHITECTURE: The Modern Musical Soundspace
In-class Viewing: Jacques Tati, Playtime
Reading:
  •  Emily Thompson, “Introduction: Sound, Modernity, and History,” “Noise and Modern Culture, 1900-1933,” “Acoustical Materials and Modern Architecture, 1900-1933,” “Conclusion: Rockefeller Center and the End of an Era,” and “Coda” In The Soundscape of Modernity: Architectural Acoustics and the Culture of Listening in America, 1900-1933 (MIT, 2002): selections may include 1-12, 115-228, 295-324.
Listening:
  •  Alban Berg, Lyric Suite, Violin Concerto: “To The Memory of An Angel.”
  •  Arnold Schönberg, Moses und Aaron, Supplemental:
    Suplemental:
      •  Theodor W. Adorno, "Sacred Fragment: Schoenberg's Moses und Aaron," Quasi Una Fantasia, also excerpts in Philosophy of New Music.
      •  “Adorno” in Musica Ficta: 117-145.
      •  Herman Miller, “Sound Masking in the Office”

MAR. 21  NO CLASS: Spring Break

MAR. 28  JAZZ, ARCHITECTURE AND THE CITY
  •  David P. Brown, Noise Orders: Jazz, Improvisation, and Architecture (Minneapolis: University of Minnesota Press, 2006).
Suplemental:

**APRIL 4**

**AMBIENT SOUND & AURAL POLITICS**

**Reading:**

**APRIL 11**

**TOUR OF JAZZ AT LINCOLN CENTER**

Meet at Jazz box office in the Time Warner Center, at Broadway/60th Street, near PINK and Hugo Boss stores

**Reading:**
- Selected readings on Jazz @ Lincoln Center in “course documents” area of Blackboard

**APRIL 18**

**SOUND ARTISTS AND SCULPTORS**

*e.g.*, Laurie Anderson, Mark Bain, Michael Brewster, Janet Cardiff, Brian Eno, Michael Graeve, Christina Kubisch, Hans Peter Kahn, Bernhard Leitner, Skip Leivsay, Alvin Lucier, Paul Miller, Robin Minard, Max Neuhaus, Bruce Odland, Steve Peters, Steve Roden, Ben Rubin, R. Murray Shafer, Barry Truax, Richard Teitlebaum, Trimpin, Achim Wollscheid, Iannis Xenakis, composer Lutz Glandien and architect Malte Lueders

**Reading:**
- Please come to class prepared to share the work of some of your own favorite sound architects or sound-space artists.

**Supplemental:**
- Helga de la Motte-Haber, Ed., *Klangkunst: Tönende Objekte und klingende Räume*.

**APRIL 25**

**MAPPING SOUNDS**

**Reading:**
- SoundTransit: [http://soundtransit.nl/](http://soundtransit.nl/)
- NY Sound Map: [www.nysoundmap.org](http://www.nysoundmap.org)

**Supplemental:**

**MAY 2**

**PRESENTATIONS**

**MAY 9**

**PRESENTATIONS**
ACOUSTICS & SOUND SPATIALIZATION


DESIGNING SOUND SPACES


Supplemental:
  - Bob Hodas, “Acoustics in Critical Listening Rooms”:
  - Daniel Ott, et. al., “Sound Box Sound”:
  - Helsinki Music Center:
  - Music Studios:

MUSIC SCENES

- Additional readings selected from Travis Jackson’s “ Scenes and Spatiality” syllabus:
  http://home.uchicago.edu/~travieso/Docs/Scenes.pdf

RADIO CITY & the Spatialization of Sound


SENSORY DESIGN


Supplemental:

THE SOUNDSCAPE

SOUND, THE TOWN, THE CITY
  o Mark M. Smith, “Listening to the Heard Worlds of Antebellum America”: 137-164.

Supplemental:
• Mark M. Smith, “Making Sense of Social History” Journal of Social History 37:1 (Fall 2003): 165+
FOR FUNDAMENTALS OF SOUND STUDIES:


FOR IMAGINING LANGUAGE:


FOR FILM MUSIC:


FOR RADIO NARRATIVES OR SOUND CULTURE:
